These are late comments that were submitted to us outside of the comment period for our proposed rulemaking. These comments are not considered as part of the Administrative Record for our Arkansas Regional Haze and Interstate Visibility Transport FIP rulemaking EPA-R06-OAR-2015-0189.

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Kelly McQueen
Assistant General Counsel

August 8, 2016

Mr. Guy Donaldson
Chief, Air Planning Section (6PD-L)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 700
Dallas, TX 75202-2733

Re: Request for EPA to Consider and Amend Administrative Record Regarding Material New Information for the Regional Haze and Interstate Visibility Transport Federal Implementation Plan for Arkansas, Docket No. EPA-R06-OAR-2015-0189

Dear Mr. Donaldson:

Entergy Arkansas Inc. ("EAI") respectfully requests that the U.S. Environmental Protection Agency ("EPA") incorporate into the above docket the attached Supplemental Comments and supporting information regarding EPA's analysis of the best available retrofit technology ("BART") requirements in the final Regional Haze and Interstate Visibility Transport Federal Implementation Plan ("FIP") for Arkansas ("Supplemental Comments"). Although the comment period on the proposed rule has closed, EPA has the authority and discretion to consider the attached Supplemental Comments and supporting information. The material submitted corrects one of the fundamental bases of EAI's October 2013 *Revised BART Five Factor Analysis – White Bluff Steam Electric Station* ("October 2013 Five Factor Analysis"). This information is thus crucial to ensuring that EPA has the most accurate, complete, and timely information, and EAI respectfully requests that EPA consider this information and include it as part of the record.

The Supplemental Comments provide critically important information that (1) became available after the comment period closed, and (2) goes to core issues in the rulemaking.

Specifically, the comments provide information on current operations and emissions at the White Bluff Steam Electric Station ("White Bluff"), as well as future projected operations at White Bluff, which necessitate corrections to EAI's October 2013 Five Factor Analysis. Since the date of EAI's Comments on the proposed FIP, dated August 7, 2015 ("EAI Comments"), due largely to market conditions, including lower natural gas prices and dispatch of the White Bluff units through the Midcontinent Independent System Operator ("MISO"), and EAI's ongoing long range resource planning, EAI's assumed remaining useful life ("RUL") of the two coal-fired units at White Bluff has changed.[1]

The Supplemental Comments demonstrate that, based on the adjustment to the RULs, in addition to other changes described in the Supplemental Comments and Exhibit 1 (*Update to the Revised BART Five Factor Analysis for White Bluff Steam Electric Station Units 1 and 2*), the sulfur dioxide ("SO_2") control technology proposed as BART for White Bluff is economically infeasible/unjustifiable. EAI now projects the RULs to be four and five years from the proposed date of compliance with the FIP, with one unit ceasing coal fired operation at the end of 2025 and the other unit at the end of 2026.

Additionally, Exhibit 2 of the Supplemental Comments includes an evaluation of the most recent monitoring ("IMPROVE") data for the two Arkansas Class I areas, Caney Creek Wilderness Area ("Caney Creek") and Upper Buffalo Wilderness Area ("Upper Buffalo). This evaluation shows that visibility impairment continues to decline and trend downward at a steeper slope than the uniform rate of progress ("URP") glidepaths for both Class I areas in Arkansas. Additionally, the updated IMPROVE data further confirm that both Caney Creek and Upper Buffalo already have surpassed the reasonable progress goals ("RPGs") that EPA has proposed for these Class I areas. Accordingly, reasonable progress controls during the first planning period are not necessary to achieve the proposed RPGs.

All of the information presented in EAI's Supplemental Comments is relevant and material to EPA's decision making, and must be considered by EPA and be part of the record to ensure full and reasoned decision making based on all pertinent and current facts. Thank you for considering these Supplemental Comments, and we will be happy to answer any follow up questions.

Sincerely,

Kelly M. McQueen
Assistant General Counsel – Environmental (Lead)
Entergy Services, Inc.

[1] The RULs discussed in this letter and the Supplemental Comments are based on an assumption that the FIP will be finalized this year and require SO_2 controls to be installed within five years. *See* EAI Comments at 6.

Attachments:

Supplemental Comments of Entergy Arkansas, Inc., including:

- Exhibit 1 – *Update to the Revised BART Five Factor Analysis for White Bluff Steam Electric Station Units 1 and 2*, Trinity Consultants (Aug. 8, 2016)

- Exhibit 2 – *Assessment of Recent Class I Area IMPROVE Monitoring Data*, Trinity Consultants, (Aug. 8, 2016)

cc: Becky Keogh, Director, Arkansas Department of Environmental Quality

Entergy Arkansas Inc.

Supplemental Comments

On the Proposed Regional Haze and Interstate Visibility Transport

Federal Implementation Plan for Arkansas

Docket No. EPA-R06-OAR-2015-0189

Submitted on:
August 8, 2016

To:
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 700
Dallas, Texas 75202-2733

I. INTRODUCTION

During the comment period on the proposed Regional Haze and Interstate Visibility Transport Federal Implementation Plan for Arkansas ("Proposed FIP"),[2] Entergy Arkansas Inc. ("EAI") submitted comments addressing the proposed sulfur dioxide ("SO_2") and nitrogen oxide ("NOx") best available retrofit technology ("BART") requirements for the two coal-fired units at the White Bluff Steam Electric Station ("White Bluff").[3] Specifically, for SO_2 BART, EAI submitted comments proposing to end coal-fired usage at the two White Bluff units by the end of 2027 for one unit and by the end of 2028 for the other unit, which limited their remaining useful lives for the purposes of calculating the cost effectiveness of the proposed SO_2 BART control technology. For NOx BART, EAI proposed a compound pound per hour/pound per million btu limitation for the White Bluff units in the event that EPA did not finalize a determination that meeting the Cross State Air Pollution Rule ("CSAPR") in Arkansas was more effective than source-specific NOx BART. EAI proposed a pound per hour limitation due to concerns that the White Bluff units would not be able to meet EPA's proposed NOx BART limit of 0.15 lb NOx/mmBtu at loads of less than 50 percent of capacity. Finally, EAI submitted IMPROVE data demonstrating that visibility is improving at a greater rate than the glidepaths for the two Arkansas Class I areas and that, as a result, reasonable progress controls on Arkansas sources are unnecessary during the first regional haze planning period.

Since the close of the comment period, new information has become available that revises EAI's assumptions for the proposed SO_2 and NOx BART requirements for the White Bluff units. Due to recent market conditions, which EAI expects will continue for the foreseeable future, the White Bluff coal-fired units have been dispatched less and are operating at lower annual average capacity factors. As a result and consistent with EAI's long-range plans, EAI now anticipates that it will cease combusting coal at the White Bluff units by the end of 2026[4], which further limits their remaining useful lives than EAI proposed in its Comments and definitively demonstrates that the cost of SO_2 control technology at White Bluff is not cost effective. Accordingly, EAI requests EPA to determine SO_2 BART for each of the White Bluff coal-fired units to be either a 30-boiler operating day emission rate of 0.06 lb SO_2/mmBtu based on the installation of the previously proposed SO_2 controls or the cessation of operation of the coal-fired units by the end of 2026 as an alternative to the installation of the costly controls, as described more fully below. In addition, EAI has refined its proposed NOx BART emission rate limitation to ensure that the White Bluff units will be able to meet the limitations at lower capacity factors. Finally, more recent Interagency Monitoring of Protected Visual Environments ("IMPROVE") data further support EAI's Comments that reasonable progress controls are unnecessary for visibility improvement at Arkansas' two Class I areas during the first planning

[2] 80 Fed. Reg. 18,944 (Apr. 8, 2015).

[3] *See* Entergy Arkansas Inc. Comments on the Proposed Regional Haze and Interstate Visibility Transport Federal Implementation Plan for Arkansas (Aug. 7, 2015); Docket No. EPA-R06-OAR-2015-0189-0166 ("EAI Comments"). These Supplemental Comments do not waive any argument or issue raised in EAI's Comments.

[4] As outlined in EAI's recent Integrated Resource Plan and consistent with its long-term strategy to diversify its fuel portfolio, this timeline – as opposed to EPA's proposed FIP requirements - would better allow EAI time to replace the units' capacity and develop other supply options including renewables and energy efficiency while continuing to provide reliable service at the lowest cost possible.

period. The recent IMPROVE data show that visibility in both Class I areas in Arkansas, Caney Creek Wilderness Area ("Caney Creek") and Upper Buffalo Wilderness Area ("Upper Buffalo), is already better than both the uniform rate of progress ("URP") goals for the first planning period and the reasonable progress goals ("RPGs") that EPA proposed for the two Class I areas.

EAI's Supplemental Comments and recommended SO_2 and NOx BART determinations address issues on which EPA requested comment during the comment period and support the comments that EAI previously submitted to EPA.[5] Accordingly, it is appropriate that EPA consider these Supplemental Comments before finalizing the Arkansas Regional Haze FIP.

II. COMMENTS

A. Corrections to the October 2013 White Bluff Five Factor Analysis

At the time EAI submitted its Comments on the Proposed FIP, EAI proposed that it would cease burning coal at the two coal-fired units at White Bluff in 2027 and 2028.[6] This changed the calculation of the costs of installing and operating SO_2 control technology on the units due to their limited remaining useful life ("RUL") of six to seven years and demonstrated that EPA's proposed SO2 BART was not feasible.[7] Since that time, there have been notable changes in the market conditions affecting dispatch of the White Bluff units. Specifically, natural gas prices have dropped sharply and are anticipated to continue to remain low.[8] The decline in natural gas prices, coupled with the White Bluff units' dispatch through the Midcontinent Independent System Operator ("MISO"), have significantly decreased the units' annual average capacity factors as compared to their prior historical annual average capacity factors. Figures 1 & 2 below illustrate this change in operation of the units.

[5] *See* EAI Comments at Sections III. A, C and E.

[6] *Id.* at 5.

[7] The RULs are based on an assumption that the FIP will be finalized this year and require controls to be installed within five years. *See id.* at 6.

[8] *See Annual Energy Outlook 2016 Early Release: Annotated Summary of Two Cases*, U.S. Energy Information Administration, at 50 (May 17, 2016), available at https://www.eia.gov/forecasts/aeo/er/pdf/0383er(2016).pdf.

Figure 1. White Bluff Unit 1 Heat Input (MMBtu/yr, 12-month Rolling Values)

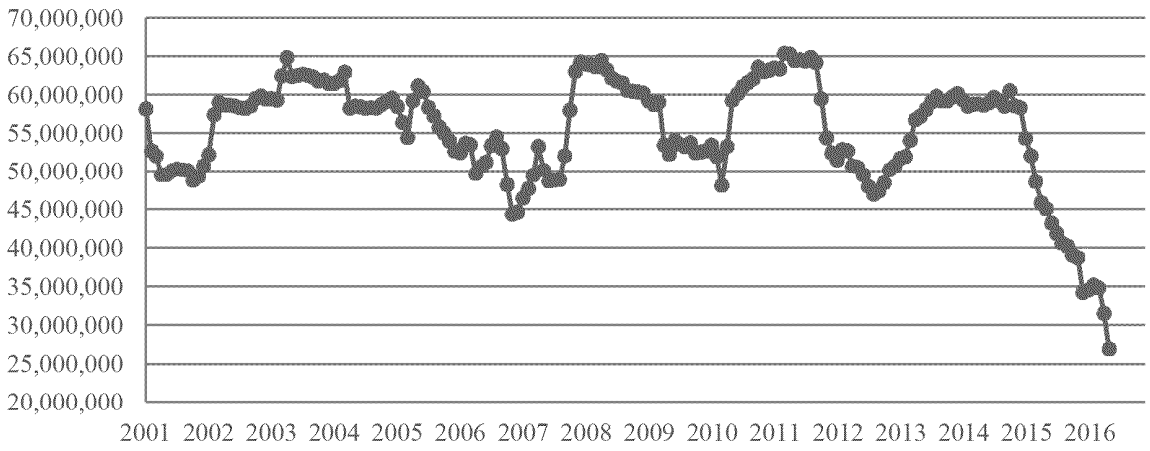
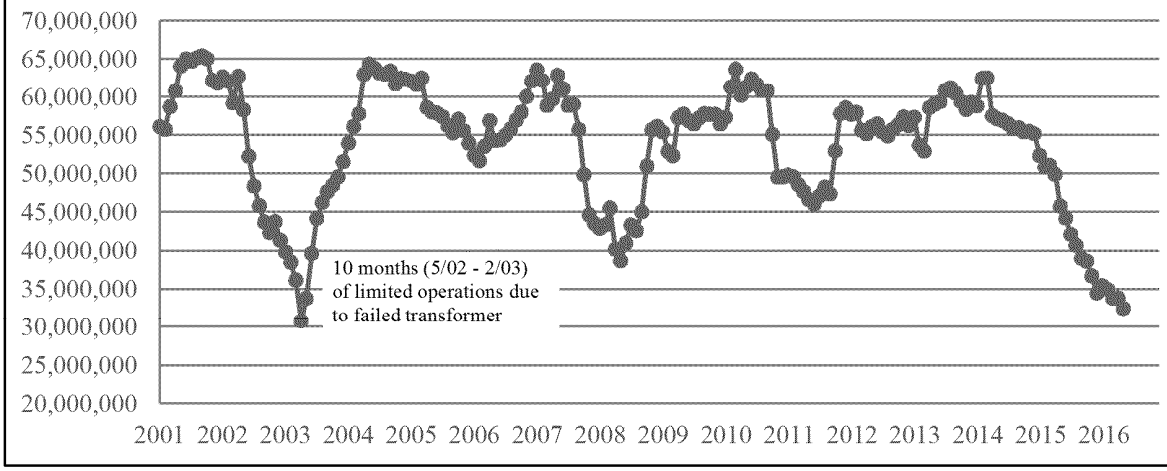


Figure 2. White Bluff Unit 2 Heat Input (MMBtu/yr, 12-month Rolling Values)



Due to the changes in market conditions at White Bluff resulting from the lower natural gas prices and lower dispatch of the White Bluff coal-fired units through MISO and consistent with EAI's ongoing resource planning, EAI has revised its analysis of the continued operation of the White Bluff units and projects that the units will cease combusting coal by the end of 2025 and the end of 2026.[9] This necessitates a change to the amortization period for SO_2 controls, since the units are not anticipated to continue operating beyond 2026. EAI further projects that one of the White Bluff units will operate at a capacity factor of 50 percent or less during 2025.

The limited RULs for the two White Bluff units, coupled with the 50 percent capacity factor operating constraint on one unit in 2025 (hereafter both are referred to as "operation restrictions"), necessitate corrections to EAI's October 2013 *Revised BART Five Factor Analysis – White Bluff Steam Electric Station* ("October 2013 Five Factor Analysis"). Specifically, as

[9] At this time, EAI is unable to make a final determination as to which unit will cease operation first.

discussed further in the attached report prepared by Trinity Consultants, *Update to the BART Five Factor Analysis for White Bluff Steam Electric Station Units 1 and 2* (Aug. 8, 2016) (Exhibit 1 to these Supplemental Comments), when the operation restrictions are taken into account for the two White Bluff units, the costs of installing the proposed SO_2 BART control technology, spray dryer absorber ("SDA") technology, is unjustifiable at White Bluff. Based on the detailed cost analysis prepared in 2015 by Sargent & Lundy,[10] the cost effectiveness of SDA would range from approximately $10,400 to $11,800 per ton.[11] Even using EPA's cost projections, which EAI believes ignores significant cost elements of such a project,[12] the costs are in excess of $5,000 per ton.[13] These are unacceptably high cost effectiveness values and cannot be considered BART for the White Bluff units.

Given their short RULs of four or five years, as demonstrated in Exhibit 1, the proposed SO_2 BART controls for the White Bluff units are not cost effective. As a result, SO_2 BART for the units should be *no additional controls*.[14] EAI requests that the final Arkansas regional haze FIP explicitly provide EAI with the option for SO_2 BART of either an emission limitation of 0.06 lb SO_2/mmBtu on a 30-boiler operating day average, or a binding requirement that (1) one unit will cease coal fired operation by the end of 2025 and the other unit by the end of 2026, and (2) one unit will be limited to a capacity factor of no greater than 50 percent in 2025.

B. NOx BART Limit for White Bluff

If EPA does not provide that compliance with CSAPR satisfies the NOx BART requirements for Arkansas' electric generating units,[15] EAI's Comments proposed that the White Bluff units meet a rolling 30-boiler operating day average NOx limit of 1,342.5 lb NOx/hr, based on the installation of low NOx burners and separated overfire air for all periods of operation and, additionally, a rolling 30-boiler operating day average NOx emission rate of 0.15 lb NOx/mmBtu for unit operation at 50-100 percent of capacity.[16] EAI proposed the pound per hour limit due to concerns that the vendor Entergy selected to supply the NOx control technology would only guarantee EPA's proposed NOx BART rate of 0.15 lb NOx/mmBtu for loads of 50 percent of capacity or greater.[17] Given the updated capacity factor information for the White Bluff units as discussed above in Section II.A, EAI has even greater concerns that the units will be unable to meet EPA's proposed 30-boiler operating day average NOx BART limit of 0.15 lb NOx/mmBtu for significant periods of time.

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[10] Exhibit B to EAI Comments.

[11] Exhibit 1 at 1-2.

[12] *See* EAI Comments at 8-11.

[13] Exhibit 1 at 3.

[14] EAI continues to propose that, as an interim SO_2 reduction measure, the White Bluff units would take a limit on their permitted SO_2 emission rates of 0.6 lb SO_2/mmBtu on a rolling 30-day average basis beginning three years from the effective date of the final FIP through ceasing operation. This is a 50 percent reduction from their current permitted limits. EAI Comments at 13.

[15] *Id.*

[16] *Id.* at 13-14; 51-52.

[17] *Id.* at 13, n. 16; 51.

EAI continues to request that, if EPA rejects a determination that CSAPR equals BART for Arkansas, EPA should adopt a pound per hour limitation for the White Bluff units when they are operating at a low capacity factor. EAI has refined its analysis of the proposed NOx limitation, however, and now proposes the following limits as NOx BART for each of the White Bluff units:

i. For unit operation at 0-49.9 percent of capacity, a limit of 1,305 lb NOx/hr, based on a 30-boiler operating day rolling average and

ii. For unit operation at 50-100 percent of capacity, a limit of 0.15 lb NOx/mmBtu based on a 30-boiler operating day rolling average to include only those hours for which the unit was dispatched at 50 percent or greater of maximum capacity.

EAI believes the revised rate of 1,305 lb NOx/hr is achievable and appropriate as NOx BART for the White Bluff units for periods when the White Bluff units are operating at a low capacity factor.

C. Most Recent IMPROVE Data

In the EAI Comments, EAI presented IMPROVE monitoring data showing that the haze index has been consistently below the uniform rate of progress ("URP") in both Caney Creek and Upper Buffalo.[18] As a result, reasonable progress controls for the first planning period are unnecessary.[19] This conclusion is bolstered by more recent IMPROVE monitoring data that has become available subsequent to the close of the comment period. As discussed further in Trinity's Report, *Assessment of Recent Class I Area IMPROVE Monitoring Data*, Trinity Consultants, (Aug. 8, 2016) (Exhibit 2 to these Supplemental Comments), the IMPROVE data for January 2014 through September 2015 show that visibility continues to improve by a greater amount than the URPs in Caney Creek and Upper Buffalo.[20]

In addition, the recent IMPROVE data further confirm that visibility in the two Arkansas Class I areas is already better than the RPGs that EPA proposed for the areas. EPA proposed to set the RPG for the 20 percent worst days at 22.27 deciviews ("dv") for Caney Creek and at 22.33 dv for Upper Buffalo.[21] The recent IMPROVE data for both Class I areas demonstrate that the areas already are exceeding the proposed RPGs, as well as Arkansas' RPGs and that visibility impairment is continuing to trend downward.[22]

Given that Caney Creek and Upper Buffalo already have surpassed the URP goals, Arkansas' RPGs, and EPA's proposed RPGs for the first planning period, reasonable progress

[18] *Id.* at 20-23.

[19] *See generally*, *id.* at 17-43 (discussion of why reasonable progress controls are unnecessary at the Independence Steam Electric Station during the first planning period).

[20] Exhibit 2 at 1-3.

[21] 80 Fed. Reg. at 18,997.

[22] Exhibit 2 at 3.

controls during the first planning period are *not necessary* to ensure reasonable progress towards the natural visibility goal. *See* 42 U.S.C. § 7491(b)(2) (requiring regional haze implementation plans to contain measures "necessary to make reasonable progress toward meeting the national goal").

III. CONCLUSION

The operation restrictions for the White Bluff coal-fired units and attendant cost information provided in these Supplemental Comments and in Exhibit 1 demonstrate that the BART determination for SO_2 for the White Bluff coal-fired units should be no additional controls. For SO_2 BART, the final Arkansas regional haze FIP should provide EAI with the option for the White Bluff coal-fired units of either meeting an emission limitation of 0.06 lb SO_2/mmBtu on a 30-boiler operating day average, or a binding requirement that (1) one unit will cease operation by the end of 2025 and the other unit by the end of 2026, and (2) one unit will be limited to a capacity factor of no greater than 50 percent in 2025.

Further, the most recent IMPROVE data provided in Exhibit 2 demonstrate that visibility already is better in Arkansas' Class I areas than the URP goals, Arkansas' RPGs or EPA's proposed RPGs for the first planning period. As a result, no additional controls are necessary to make reasonable progress towards reducing visibility impairment at the two Arkansas Class I areas for the first planning period.

The information in these Supplemental Comments and attached Exhibits, which was not available during the comment period on the proposed FIP, is current and highly relevant as it goes to three of the issues at the core of the rulemaking□the SO_2 BART determination for White Bluff, the NOx BART limits for White Bluff, and the need for reasonable progress controls during the first planning period. Accordingly, EAI respectfully requests that EPA include these Supplemental Comments and attached Exhibits in the administrative record for the Proposed FIP and incorporate this information into the Agency's analysis of SO_2 and NOx BART for White Bluff and the reasonable progress requirements for the first regional haze planning period.

UPDATE TO THE BART FIVE FACTOR ANALYSIS FOR WHITE BLUFF STEAM ELECTRIC STATION UNITS 1 AND 2 REDFIELD, ARKANSAS (AFIN 35-00110)

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August 8, 2016

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Trinity Consultants

Exhibit 1 to EAI Supplemental Comments

Update to the BART Five Factor Analysis
for White Bluff Steam Electric Station Units 1 and 2

This report contains updated control cost calculations for the SO_2 and NO_X BART Five Factor Analyses for White Bluff Units 1 and 2 (SN-01 and SN-02). The update is necessary to consider new information regarding the remaining useful life ("RUL") of the units,[1] which affects the capital recovery period for the proposed BART controls, i.e., for SO_2 control, Spray Dryer Absorber technology ("SDA"). This new information was not available when the *Revised BART Five Factor Analysis – White Bluff Steam Electric Station* was submitted on October 15, 2013.

EAI anticipates one of the two coal-fired units will cease operating in 2025 and the other unit in 2026. Based on FIP promulgation in 2016 and a five-year compliance timeline, this means that whichever unit ceases operations in 2025 would have an RUL of four (4) years and the other unit would have an RUL of five (5) years. Additionally, one of the units will operate at a capacity factor (CF) of no greater than 50 percent in the year 2025. Together, the RULs and CF limitation are referred to herein as "the operation restrictions".

Updated SO_2 Control Costs

The update to consider the operation restrictions results in average cost effectiveness values for SDA of between approximately $10,400 and $11,800 per ton of SO_2 removed depending on which of the two units has an RUL of four years and which has an RUL of five years. This entire range of average cost effectiveness is infeasible as BART.

The updated emissions and cost effectiveness calculations for SDA based on the operation restrictions are presented in Table 1 and Table 2 for Unit 1 and Unit 2, respectively. The emissions information and capital and O&M cost estimates are based on Sargent & Lundy's 2015 report.[2] Using instead the emissions information and capital and O&M cost estimates from EPA's proposed FIP Technical Support Document, Appendix A, the average cost effectiveness estimates for SDA are between approximately $5,000 and $5,900 per ton of SO_2 removed. Summaries of these estimates are shown in Tables 3 and 4. Even these unrealistic and artificially low cost values are also economically infeasible.

[1] Remaining useful life is one of five factors to be considered in the BART impact analysis. The other four factors are cost of compliance, energy impacts, non-air quality environmental impacts, and visibility improvement.
[2] Sargent & Lundy LLC, *Entergy Arkansas, Inc. - White Bluff Dry FGD Cost Estimate and Technical Basis*, Report No. SL-012831 (July 2015)(Exhibit B to EAI's Comments on the proposed FIP).

Table 1. SDA Cost Effectiveness - White Bluff Unit 1

Baseline Emission Rate (tpy)	15,939	
Controlled Emission Level (lb/MMBtu)	0.06	
Controlled Emission Rate (tpy)	1,675	
Emissions Reduction (tpy) [1]	14,264	13,414
Total Capital Investment ($)	536,185,000	
Interest Rate (%)	7	
Capital Recovery Period = RUL (Years)	4	5
Capital Recovery Factor (CRF)	0.295	0.244
Annualized Capital Costs ($/yr)	158,296,888	130,770,532
Direct Variable and Fixed O&M Costs ($/yr) [2]	10,166,000	9,560,422
Total Annual Costs ($/yr)	168,462,888	140,330,954
Cost Effectiveness ($/ton)	11,810	10,461

[1] A 50 % capacity factor (CF) during 2025 is incorporated by subtracting from the 5-year RUL annual-average reduction value an amount equal to the annual-average reduction value scaled from the baseline CF to 50 %.

[2] Annual O&M costs are adjusted, assuming a linear relationship, to reflect the 50 % capacity factor during 2025 using the same method described above for the emissions reduction adjustment.

Table 2. SDA Cost Effectiveness - White Bluff Unit 2

Baseline Emission Rate (tpy)	16,034	
Controlled Emission Level (lb/MMBtu)	0.06	
Controlled Emission Rate (tpy)	1,681	
Emissions Reduction (tpy) [1]	14,353	13,490
Total Capital Investment ($)	536,185,000	
Interest Rate (%)	7	
Capital Recovery Period = RUL (Years)	4	5
Capital Recovery Factor (CRF)	0.295	0.244
Annualized Capital Costs ($/yr)	158,296,888	130,770,532
Direct Variable and Fixed O&M Costs ($/yr) [2]	10,166,000	9,555,003
Total Annual Costs ($/yr)	168,462,888	140,325,535
Cost Effectiveness ($/ton)	11,737	10,402

[1] A 50 % capacity factor (CF) during 2025 is incorporated by subtracting from the 5-year RUL annual-average reduction value an amount equal to the annual-average reduction value scaled from the baseline CF to 50 %.

[2] Annual O&M costs are adjusted, assuming a linear relationship, to reflect the 50 % capacity factor during 2025 using the same method described above for the emissions reduction adjustment.

Table 3. SDA Cost Effectiveness - White Bluff Unit 1 ***Using FIP Information***

Baseline Emission Rate (tpy)	15,816	
Controlled Emission Level (lb/MMBtu)	0.06	
Controlled Emission Rate (tpy)	1,453	
Emissions Reduction (tpy) [1]	14,363	13,534
Total Capital Investment ($)	247,537,295	
Interest Rate (%)	7	
Capital Recovery Period = RUL (Years)	4	5
Capital Recovery Factor (CRF)	0.295	0.244
Annualized Capital Costs ($/yr)	73,079,969	60,372,043
Direct Variable and Fixed O&M Costs ($/yr) [2]	12,029,724	11,335,696
Total Annual Costs ($/yr)	85,109,693	71,707,739
Cost Effectiveness ($/ton)	5,926	5,298

[1] A 50 % capacity factor (CF) during 2025 is incorporated by subtracting from the 5-year RUL annual-average reduction value an amount equal to the annual-average reduction value scaled from the baseline CF to 50 %.

[2] Annual O&M costs are adjusted, assuming a linear relationship, to reflect the 50 % capacity factor during 2025 using the same method described above for the emissions reduction adjustment.

Table 4. SDA Cost Effectiveness - White Bluff Unit 2 ***Using FIP Information***

Baseline Emission Rate (tpy)	16,697	
Controlled Emission Level (lb/MMBtu)	0.06	
Controlled Emission Rate (tpy)	1,476	
Emissions Reduction (tpy) [1]	15,221	14,266
Total Capital Investment ($)	247,537,295	
Interest Rate (%)	7	
Capital Recovery Period = RUL (Years)	4	5
Capital Recovery Factor (CRF)	0.295	0.244
Annualized Capital Costs ($/yr)	73,079,969	60,372,043
Direct Variable and Fixed O&M Costs ($/yr) [2]	12,029,724	11,275,230
Total Annual Costs ($/yr)	85,109,693	71,647,273
Cost Effectiveness ($/ton)	5,592	5,022

[1] A 50 % capacity factor (CF) during 2025 is incorporated by subtracting from the 5-year RUL annual-average reduction value an amount equal to the annual-average reduction value scaled from the baseline CF to 50 %.

[2] Annual O&M costs are adjusted, assuming a linear relationship, to reflect the 50 % capacity factor during 2025 using the same method described above for the emissions reduction adjustment.

Updated NO_X Control Costs

Consideration of the operation restrictions results in NO_X control cost effectiveness estimate changes as summarized in Table 5. The proposed BART control technology remains LNB+SOFA as presented in the October 15, 2013 *Revised BART Five Factor Analysis – White Bluff Steam Electric Station* at the emission rates presented in EAI's August 8, 2016, supplemental comments.

Table 5. NOx Controls Cost Effectiveness

	Baseline Emission Rate	Controlled Emission Level	Controlled Emission Rate [1]	NOx Reduced	NOx Reduced for 5-Year RUL [2]	Capital Cost	Annualized Capital Cost, 4-year RUL	Annualized Capital Cost, 5-year RUL	Annual O&M Cost, 4-year RUL	Annual O&M Cost, 5-year RUL [3]	Total Annual Cost	Average Cost Effectiveness	Incremental Cost Effectiveness
	(tpy)	(lb/MMBtu)	(tpy)	(tpy)	(tpy)	($)	($/yr)	($/yr)	($/yr)	($/yr)	($/yr)	($/ton)	($/ton)
SN-01 LNB/SOFA	7,249	0.15	4,145	3,104	2,919	10,461,206	3,088,442	2,551,391	319,887	300,831	2,852,222 - 3,408,329	977 - 1,098	
SN-01 LNB/SOFA/SNCR	7,249	0.13	3,592	3,657	3,439	21,371,325	6,309,416	5,212,267	4,849,000	4,560,150	9,772,417 - 11,158,416	2,842 - 3,051	13,314 - 14,022
SN-01 LNB/SOFA/SCR	7,249	0.055	1,520	5,729	5,388	230,329,138	67,999,638	56,175,134	3,444,000	3,238,844	59,413,978 - 71,443,638	11,027 - 12,470	22,910 - 29,087
SN-02 LNB/SOFA	8,185	0.15	4,060	4,125	3,877	14,488,206	4,277,326	3,533,539	312,838	294,036	3,827,575 - 4,590,164	987 - 1,113	
SN-02 LNB/SOFA/SNCR	8,185	0.13	3,519	4,666	4,386	25,398,325	7,498,300	6,194,415	4,853,000	4,561,325	10,755,740 - 12,351,300	2,452 - 2,647	13,615 - 14,336
SN-02 LNB/SOFA/SCR	8,185	0.055	1,489	6,697	6,294	206,747,898	61,037,793	50,423,889	3,466,000	3,257,686	53,681,575 - 64,503,793	8,529 - 9,632	20,626 - 25,688

[1] The future annual heat input was estimated by multiplying the average hourly heat input from CAMD for 2009-2011 for each boiler by the average number of operating hours for each boiler from 2009-2011.

[2] A 50 % capacity factor (CF) during 2025 is incorporated by subtracting from the 5-year RUL annual-average reduction value an amount equal to the annual-average reduction value scaled from the baseline CF to 50 %.

[2] Annual O&M costs are adjusted, assuming a linear relationship, to reflect the 50 % capacity factor during 2025 using the same method described above for the emission emissions reduction adjustment.

ASSESSMENT OF RECENT CLASS I AREA IMPROVE MONITORING DATA

Prepared By:

TRINITY CONSULTANTS, INC.
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In conjunction with:

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Trinity Project No. 163701.0059

August 8, 2016

Entergy
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Trinity Consultants

Exhibit 2 to EAI Supplemental Comments

Assessment of Recent Class I Area IMPROVE Monitoring Data

Since the August 7, 2015 submittal of Trinity Consultant's *Regional Haze Modeling Assessment Report – Entergy Arkansas, Inc. – Independence Plant* (Trinity's report), measured concentration data for January 2014 through September 2015 from the Interagency Monitoring of Protected Visual Environments ("IMPROVE") network of Class I area monitors has become available. It is prudent to review this data for the two Arkansas Class I areas – Caney Creek ("CACR") and Upper Buffalo ("UPBU") – to determine if the trends identified in Trinity's report continue.

A summary of all available haze index values – from 2002 through 2015 (average of first nine months) – are shown in the following tables. As explained in Trinity's report, the IMPROVE equation is applied to the concentration data to calculate light extinction (Mm^{-1}), and then light extinction is converted to haze index (dv).

Table 1. Haze Indices for Caney Creek

Year	Observed 20% Worst Haze Index (dv)	Observed 20% Best Haze Index (dv)
2002	27.21	11.88
2003	26.54	10.74
2004	25.34	11.11
2005	29.21	12.93
2006	25.68	12.51
2008	23.70	9.24
2009	22.68	8.09
2010	22.94	10.76
2011	22.67	11.71
2012	21.49	9.54
2013	21.35	8.61
2014	20.72	8.52
2015	20.67	8.35

Table 2. Haze Indices for Upper Buffalo

Year	Observed 20% Worst Haze Index (dv)	Observed 20% Best Haze Index (dv)
2002	26.74	12.83
2003	27.22	10.62
2004	25.58	10.74
2005	30.47	13.34
2006	25.42	13.00
2007	26.17	12.45
2008	24.60	10.49
2009	22.62	9.40
2011	23.21	11.51
2012	21.56	10.31
2013	21.25	8.60
2014	20.49	8.13
2015	20.45	7.81

The following figures illustrate how these measured values compare to the Uniform Rate of Progress ("URP") curves for each area. The figures are updates to Figures 3-3 and 3-4 of Trinity's report, and, as such, also show the projected haze index values based on the scenario-specific modeling summarized in Trinity's report.

Figure 1. Caney Creek Observed Haze Index, Uniform Rate of Progress, and Projected Haze Index

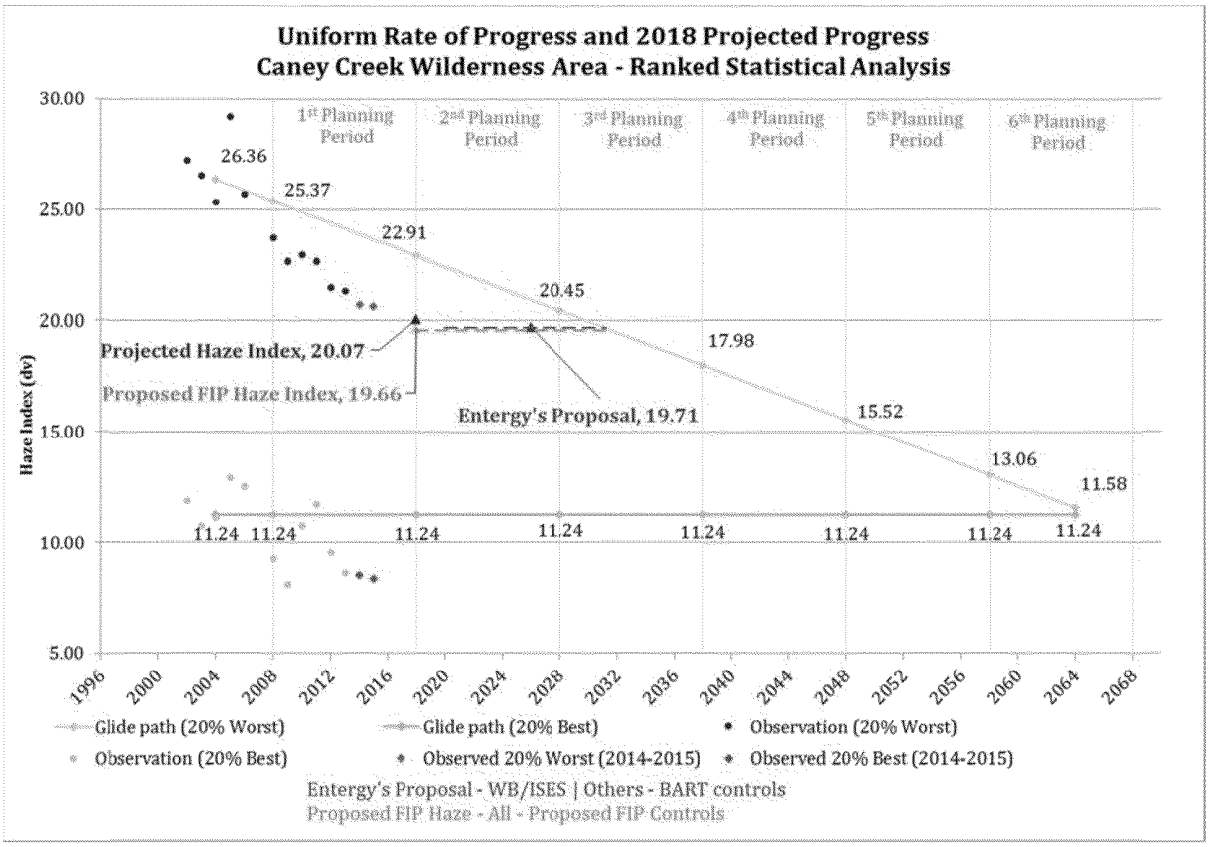
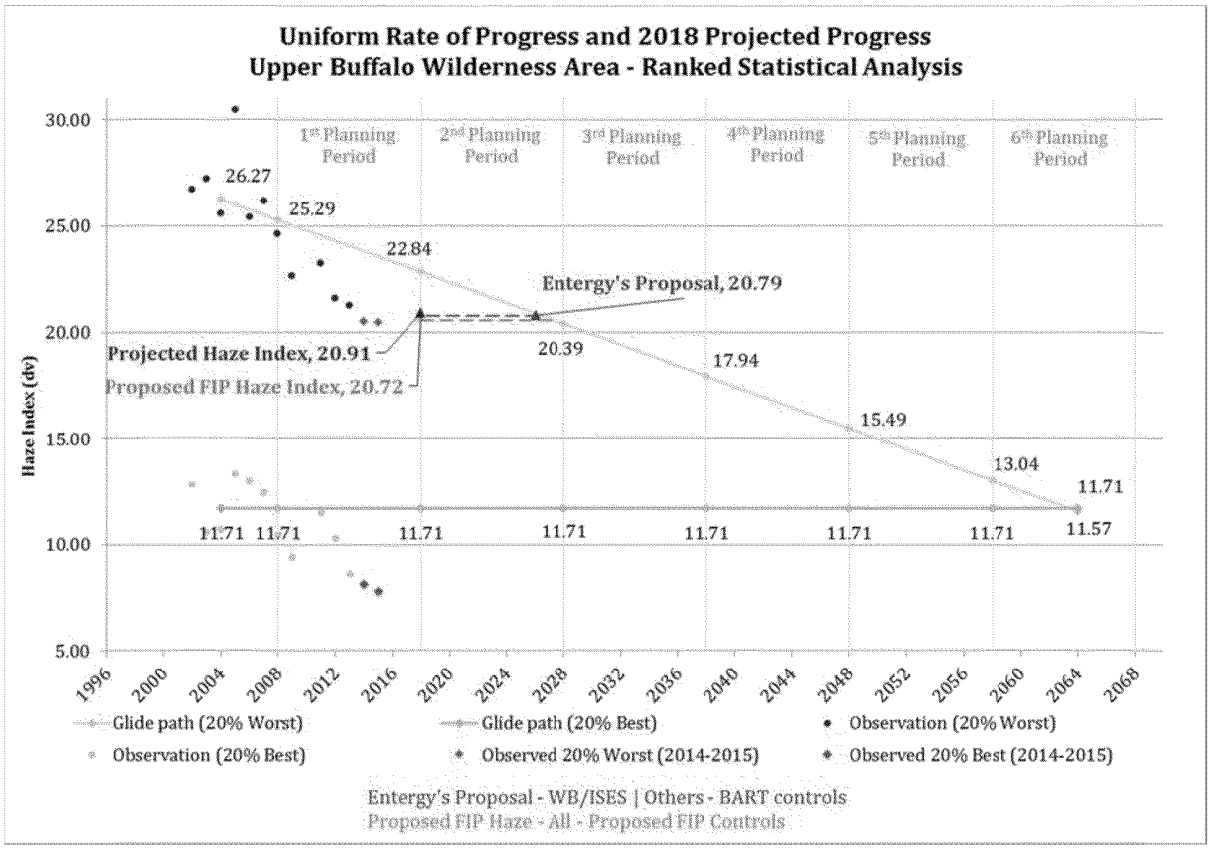


Figure 2. Upper Buffalo Observed Haze Index, Uniform Rate of Progress, and Projected Haze Index



As shown above, the actual visibility impairment at CACR and UPBU have continued to decrease through September 2015. The average 20 percent worst haze indices for CACR decreased from 21.49 dv in 2012 to 20.67 in 2015. Similarly, visibility improved at UPBU, where the average 20 percent worst haze indices decreased from 21.56 dv in 2012 to 20.45 dv in 2015. As shown in the figures and table below, these values are significantly less than (i.e., better than), and ahead of schedule of, the Reasonable Progress Goals (RPGs) proposed by ADEQ[1] of 22.48 dv by 2018 for the 20 percent worst days at CACR and 22.52 dv by 2018 for the 20 percent worst days at UPBU, and those proposed by EPA[2] of 22.27 dv for CACR and 22.33 dv for UPBU.

Table 3. 2018 Reasonable Progress Goals Compared to 2015 Visibility for the 20 % Worst Days

Class I Area	ADEQ-Proposed RPG for 2018 (dv)	EPA-Proposed RPG for 2018 (dv)	Actual Visibility in 2015 (dv)
Caney Creek	22.48	22.27	20.67
Upper Buffalo	22.52	22.33	20.45

[1] Arkansas's 2008 Regional Haze State Implementation Plan (SIP).
[2] April 18, 2015 proposed Arkansas Regional Haze Federal Implementation Plan (FIP).

Figure 3. Caney Creek Observed Haze Index, 20% Worst Days, and Proposed Reasonable Progress Goals

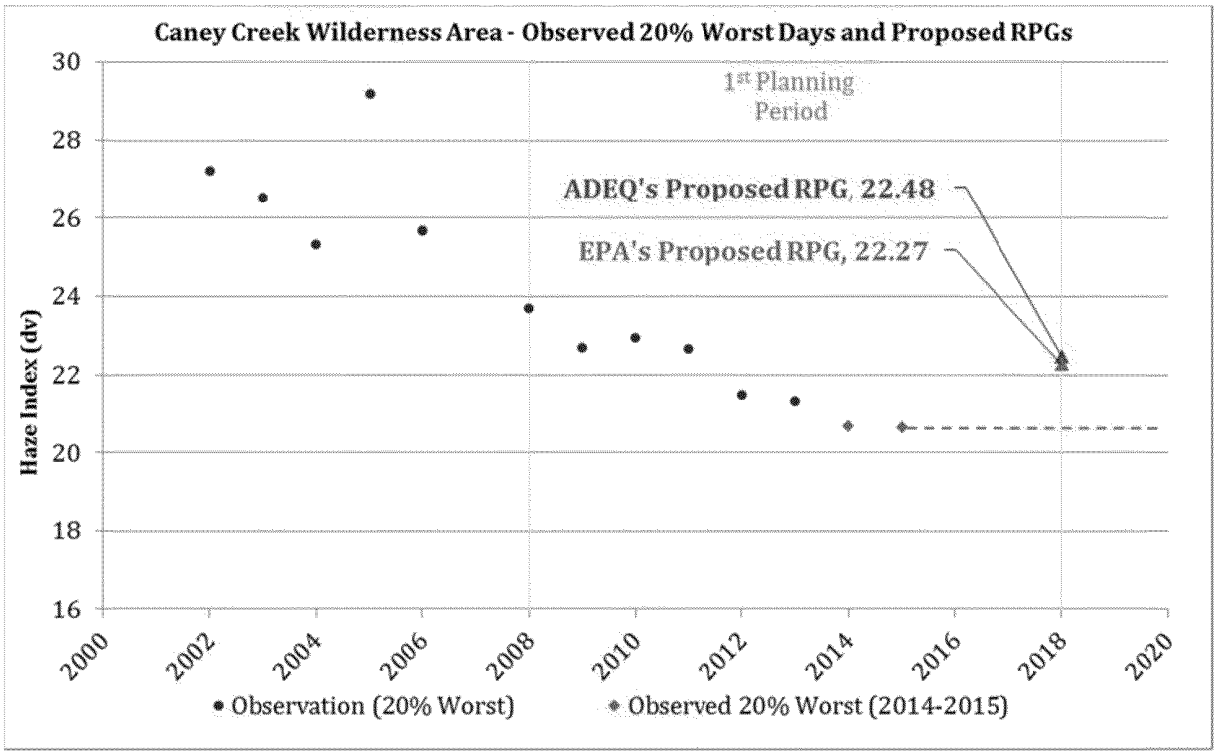
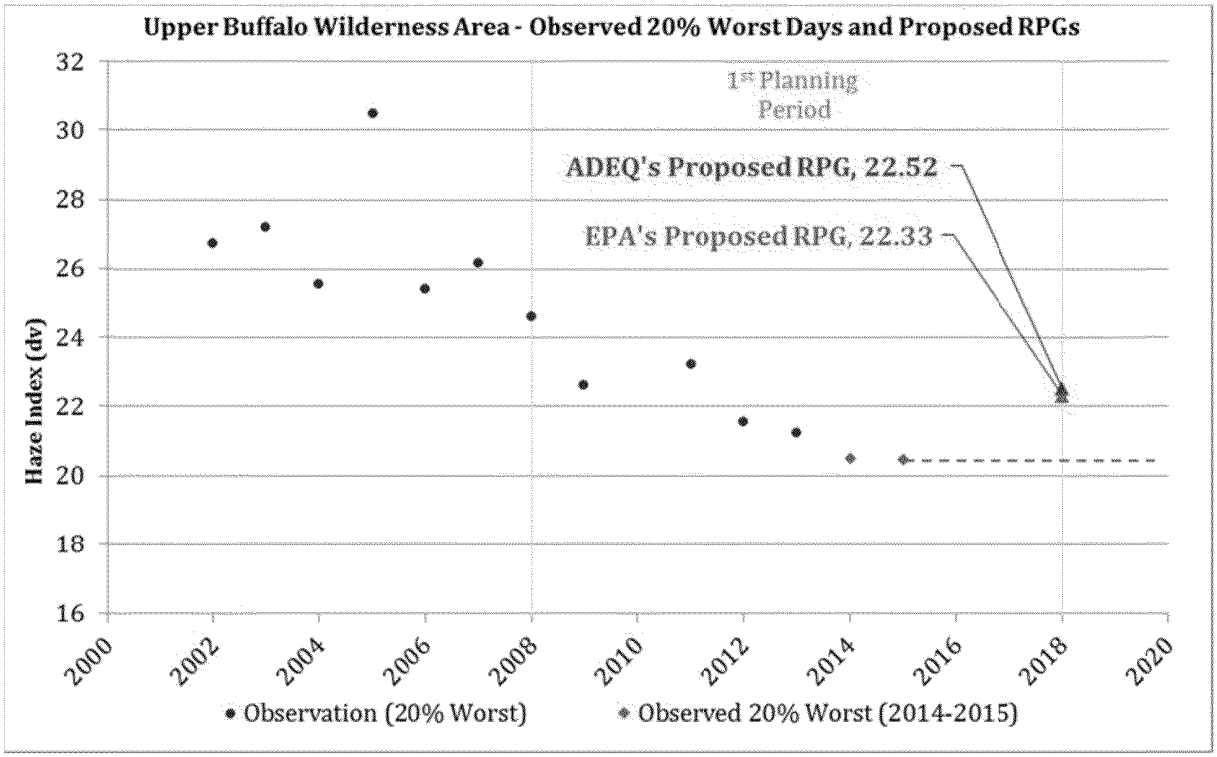


Figure 4. Upper Buffalo Observed Haze Index, 20% Worst Days, and Proposed Reasonable Progress Goals



American Electric Power
1201 Elm Street, Suite 800
Dallas, TX 75270
AEP.com

September 10, 2013

VIA ELECTRONIC SUBMITTAL

Mary Pettyjohn
Arkansas Department of Environmental Quality
5301 Northshore Drive
Little Rock, AR 72118

Dayana Medina
U.S. Environmental Protection Agency, Region 6
Multimedia Planning and Permitting Division
Air Planning Section (6PD-L)
1445 Ross Avenue
Dallas, TX 75202

Re: Application for BART Determination for SO_2 and NOx
At the Flint Creek Power Plant, Gentry, Arkansas (AFIN 04-00107)

Dear Ms. Pettyjohn and Ms. Medina:

Below are the responses to each of the questions/requests sent to Southwestern Electric Power Company (SWEPCO) on August 21, 2013, regarding the cost evaluation and proposed emission levels for NO_X control technologies evaluated in the BART five factor analysis for the Flint Creek Power Plant. We also are providing an updated report that incorporates revisions discussed below.

We have summarized and numbered the questions in your August 21, 2013 email to set off the specific responses. If we have misinterpreted your questions, please let us know.

1. *De-escalation of LNB/OFA and SCR Cost Estimates.*

In the enclosed report, we have revised the cost estimates for LNB/OFA and SCR by de-escalating the total annual cost values by three (3) percent per year to present updated costs on a current (2013/2014) basis.

2. *SCR Equipment Life for Capital Recovery*

In the enclosed report, we have revised the cost estimates for SCR to be based on a 30-year life for capital recovery purposes.

3. *LNB/OFA Equipment Life for Capital Recovery*

In the enclosed report, we have revised the cost estimates for LNB/OFA to be based on a 30-year life for capital recovery purposes.

4. *SCR Cost v. Visibility Benefit*

We agree with EPA's assessment that even after the revisions mentioned above, the visibility benefits of SCR do not justify the cost of control.

4. *Emission Level for LNB/OFA*

SWEPCO has requested a 30-day rolling average limitation of 0.23 lb/MMBtu following installation of the LNB/OFA systems at Flint Creek Station, consistent with EPA's determination of the presumptive BART level for this equipment on this type of electric generating unit. SWEPCO submitted information on anticipated levels of controlled NOx emissions from the manufacturer of the LNB/OFA system in support of its request, which ranged from 0.145 – 0.218 lb/MMBtu based on four-hour tests. SWEPCO also submitted actual controlled NO_X emissions data from similar units. EPA agrees that the PacifiCorp Wyodak unit is the most similar to Flint Creek in terms of its uncontrolled emission rate, and agreed that the NO_X emissions for this unit have been as high as 0.21 lb/MMBtu following installation of similar equipment from the same manufacturer. Welsh Unit 2, which is a sister unit to Flint Creek, has also installed equipment from the same manufacturer, and since May of 2005 has measured emissions as high as 0.191 lb/MMBtu.

NO_X emissions are primarily produced as part of the combustion process as a function of the temperature in the combustion zone, and can vary significantly from unit to unit. Pursuing the lowest achievable NO_X emission rates at an electric generating unit can have adverse consequences, including accelerated deterioration of boiler tubes, leading to expensive and time-consuming repairs. In addition, NO_X production is inversely related to the production of CO from the boiler, and pursuing a NO_X rate lower than the requested rate could increase CO production to the point that Flint Creek would need to accept restrictions on its maximum output rating and capacity factor in order to simultaneously achieve both its CO and NO_X limits.

While the requested emission rate is slightly higher than the highest averages achieved at similar units, some margin for compliance is necessary and desirable to accommodate the inherent variability of fuel supply, boiler tune-ups, and attributable to ordinary wear and tear of the equipment. Although the measured performance of Wyodak and Welsh Unit 2 confirms the likely achievability of the requested rate, their current permitted emission limits are as high or higher than the requested rate (0.23 and 0.36 lb/MMBtu, respectively), further confirming that some compliance margin is appropriate. Accordingly, ADEQ should find that the BART

emission rate is 0.23 lb/MMBtu, consistent with EPA's determination of presumptive BART and prior BART determinations for similar units.

We hope that this information will satisfactorily address the questions and concerns outlined in the August 21, 2013 email. Please contact me at (214) 777-1113 to provide any additional information you may require.

Sincerely,

Kris Gaus, QEP
Environmental Specialist
Air Quality Services

File:FLC.10.90.50.10.2013

To: Taheri, Diane[Taheri.Diane@epa.gov]
Cc: Harrison, Ben[Harrison.Ben@epa.gov]; Donaldson, Guy[Donaldson.Guy@epa.gov]; Price, Lisa[Price.Lisa@epa.gov]; Stenger, Wren[stenger.wren@epa.gov]; Spalding, Susan[Spalding.Susan@epa.gov]; Vargo, Steve[Vargo.Steve@epa.gov]
From: Rhea, William
Sent: Wed 8/23/2017 4:45:52 PM
Subject: AIS/Blurbs 8/28
6MM Blurbs 8 23 17.docx
Arkansas RH NOx SIP revision_Proposal_Action Information Sheet.docx

Diane,

These are the AIS/Blurbs for 8/28:

The 6MM Events Calendar Update.

On September 4, 2017, the Lead Based Paint Circuit Rider will be traveling to Pampa, TX, to attend the "Annual Chautauqua" Family Celebration to distribute outreach and education materials for Lead Based Paint, Children's Environmental Health, Asthma, Integrated Pest Management and Pesticide Safety. The target audience is librarians, school nurses, building code officials, and local health department officials. The "Annual Chautauqua" Family Celebration is a community outreach program that occurs on Labor Day weekend.

On September 9, 2017, the Lead Based Paint Circuit Rider will be traveling to Dimmitt, TX to attend the "Castro County Fair" to distribute outreach and education materials for Lead Based Paint, Children's Environmental Health, Asthma, Integrated Pest Management and Pesticide Safety. The target audience is librarians, school nurses, building code officials, and local health department officials. The "Castro County Fair" is a community event that brings members of the community together to celebrate autumn.

Kirtland Hydrogeology Working Group Meeting September 6-8, 2017: Region 6 RCRA staff will present EPA's review comments on the Kirtland Bulk Fuels Facility RCRA Facility Investigation (RFI) during a technical (hydrogeology) working group meeting scheduled for September 6-8 in Albuquerque. Region 6 provided written technical comments to the New Mexico Environment Department on April 11, 2017, informing them that the RFI accomplished

the goals of the site investigation.

EPA Meeting with City of Grand Prairie on August 29, 2017, regarding Delfasco Forge: RCRA and Superfund staff will meet with the City of Grand Prairie to discuss the upcoming October 2017 passive soil gas sampling event, proposed sampling locations, and proposed community outreach schedules. Delfasco Forge operated a metal forging and fabrication plant from 1981 to 1997, and used trichloroethylene (TCE) as a degreaser. The TCE-contaminated plume extends under approximately 65 acres of residential property. The purpose of the sampling is to determine if the TCE plume is changing.

August 23, 2017

Arkansas Regional Haze NO_X EGU SIP Revision and NOx FIP Withdrawal Proposal: EPA is proposing approval of the revision of the Arkansas Regional Haze State Implementation Plan (SIP) that was submitted to EPA for parallel processing on July 12, 2017. Arkansas' proposed SIP revision relies on the Cross State Air Pollution Rule (CSAPR) to address the nitrogen oxide (NO_X) requirements for nine electric generating units (EGUs) in Arkansas and proposing to withdraw federal implementation plan (FIP) emission limits for NO_X that currently apply to the nine aforementioned units. The Acting Regional Administrator is scheduled to sign the proposal on August 30, 2017.

Final Title V Operating Permit Program Evaluation for the Arkansas Department of Environmental Quality: EPA is releasing the final Title V Operating Permit Program. Evaluation for the Arkansas Department of Environmental Quality (ADEQ) on August 31, 2017. Findings have been thoroughly vetted with ADEQ, and it provided a commitment letter to EPA Region 6 identifying specific actions to address identified concerns. The most significant issue relates to documenting utilization of Title V fees to pay only ADEQ Title V program's proportional share of overhead costs.

August 23, 2017

Region 6 Action Information Sheet

Action Title: Arkansas Regional Haze NO_X EGU SIP Revision Proposal

Purpose: To propose approval of a proposed revision of the Arkansas Regional Haze State Implementation Plan (SIP) that was submitted to EPA for parallel processing on July 12, 2017. Arkansas' proposed SIP revision relies on the Cross State Air Pollution Rule (CSAPR) to address the nitrogen oxide (NO_X) requirements for nine electric generating units (EGUs) in Arkansas: the Arkansas Electric Cooperative Corporation (AECC) Bailey Plant Unit 1; AECC McClellan Plant Unit 1; the American Electric Power/Southwestern Electric Power Company (AEP/SWEPCO) Flint Creek Plant Boiler No. 1; Entergy Arkansas, Inc. (Entergy) Lake Catherine Plant Unit 4; Entergy White Bluff Plant Units 1 and 2, and the Auxiliary Boiler; and Entergy Independence Plant Units 1 and 2. In conjunction with our proposed approval of the SIP revision, we are also proposing to withdraw federal implementation plan (FIP) emission limits for NO_X that currently apply to the nine aforementioned units.

Background: Arkansas submitted a Regional Haze SIP on September 9, 2008, to address the first regional haze implementation period. On March 12, 2012, EPA partially approved and partially disapproved the 2008 Arkansas Regional Haze SIP. On September 27, 2016, EPA published the Arkansas Regional Haze FIP, which addressed the disapproved portions of the 2008 Arkansas Regional Haze SIP. The revision proposal relies on CSAPR as an alternative to Best Available Reasonable Technology (BART) to address the NO_X BART requirements for Arkansas EGUs. The revision proposal also makes the determination that no additional NO_X emission controls for Arkansas sources, beyond Arkansas EGU participation in the CSAPR ozone season NO_X trading program, are required for achieving reasonable progress in Arkansas. The revision proposal would also replace the FIP's source specific NO_X emission limits that currently apply to the nine EGUs.

Key Issues/Internal Review: Region 6 program staff have worked closely with the Office of Regional Counsel, Office of General Counsel, and Office of Air Quality Planning and Standards staff in the development of this Federal Register notice. A key issue related to this proposed action is that Arkansas' July 2017 Regional Haze SIP revision is relying on CSAPR to satisfy the regional haze NO_X requirements for Arkansas EGUs. We cannot finalize this proposal unless and until EPA finalizes the national rulemaking that finds that CSAPR continues to be better than BART.

Stakeholder Involvement: Based on informal discussions with ADEQ staff, we are aware that Arkansas had discussions with the affected facilities and that they expressed their support of this SIP revision proposal and withdrawal of the corresponding parts of the FIP.

Legal Deadlines: There are no legal deadlines for signature on this Federal Register notice proposal. However, we find that it is prudent to move forward with this proposed action quickly, as the source-specific NO_X compliance deadlines currently required by the FIP are less than one year away.

Timing: It is recommended that the Federal Register notice proposing approval of the Arkansas Regional Haze SIP revision and withdrawal of the corresponding parts of the FIP be signed as expeditiously as possible.

To: OGC Immediate Office All[OGC_Immediate_Office_All@epa.gov]
Cc: Patrick, Monique[Patrick.Monique@epa.gov]
From: Graham, Cheryl
Sent: Mon 10/16/2017 5:57:52 PM
Subject: 10/16/17 ARLO reg review agenda
17-10-16 agenda.docx

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Gunasekara, Mandy[Gunasekara.Mandy@epa.gov]; Harlow, David[harlow.david@epa.gov]; Dunham, Sarah[Dunham.Sarah@epa.gov]; Schwab, Justin[Schwab.Justin@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]
Cc: Page, Steve[Page.Steve@epa.gov]; Koerber, Mike[Koerber.Mike@epa.gov]; Fonseca, Silvina[Fonseca.Silvina@epa.gov]; Treimel, Ellen[Treimel.Ellen@epa.gov]; Cyran, Carissa[Cyran.Carissa@epa.gov]; Dominguez, Alexander[dominguez.alexander@epa.gov]
From: Lewis, Josh
Sent: Thur 10/12/2017 8:47:46 PM
Subject: Moving towards signature by Monday - Final PacifiCorp Hunter Title V Petition Order (OA)(OAR-18-000-0235)
Hunter Action Memo 10-10-17.docx
Hunter one-pager 10-10-17.docx
PacifiCorp Hunter ORDER 10-10-17 clean.docx
hunter_petition2016_0.pdf

Attached is the PacifiCorp Hunter Title V Order that we are reviewing now in the OAR front office and that we will move quickly through the system so it's ready for the Administrator's signature no later than Monday. Also attached is the action memo, a one page backgrounder, and the incoming petition.

My understanding is this version of the order has been reviewed and approved by OAQPS, OGC staff, and OECA. If anyone has edits, please let me know.

Josh

564-2095

To: Minoli, Kevin[Minoli.Kevin@epa.gov]; Baptist, Erik[baptist.erik@epa.gov]; Fotouhi, David[Fotouhi.David@epa.gov]; Schwab, Justin[Schwab.Justin@epa.gov]
Cc: Albores, Richard[Albores.Richard@epa.gov]; Trudeau, Shaun[Trudeau.Shaun@epa.gov]
From: Mills, Derek
Sent: Thur 10/12/2017 7:55:21 PM
Subject: Litigation Deadlines Chart
One Docket report 10-12-17 (with attorney names).pdf
One Docket report 10-12-17.pdf

Attached are two charts of OGC's upcoming litigation deadlines (from the One Docket database) until December 15. One chart includes attorney names, and the other does not.

Please Note: I will be out of the office for most of next week, and plan to send the next version of this chart on Monday, October 23. Let me know if this will be an issue, and I can find coverage to produce the chart earlier. Thanks!

Derek Mills

Special Assistant, Office of General Counsel

U.S. Environmental Protection Agency

(202) 564-3341

SIERRA CLUB

April 11, 2016

via Email (without exhibits)[1] *and Federal Express*

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USEPA Headquarters
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1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460
Fax number (202) 501-1450
Email: McCarthy.gina@epa.gov

Re: Petition for Objection to Utah DAQ's Proposed Title V Permit No. 1500101002 for the Operation of the PacifiCorp Hunter Power Plant, Castle Dale, UT 84513.

Dear Administrator McCarthy:

Enclosed is a petition requesting that the U.S. Environmental Protection Agency object to the Title V Operating Permit issued by the Utah Department of Air Quality to PacifiCorp's Hunter Power Plant for the operation of the power plant in Castle Dale, Utah.

Thank you for your consideration.

Sincerely,

Andrea Issod
Senior Attorney
Sierra Club
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San Francisco, CA 94105
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andrea.issod@sierraclub.org

William J. Moore, III
William J. Moore, III, P.A.
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Jacksonville, Florida 32204
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wmoore@wjmlaw.net

[1] Please note exhibits to this Petition will be burned to a DVD and sent *VIA* Federal Express; they and are also available at this Box.com: https://app.box.com/s/9zzjtr3e82566we0aiinnerpgqgyk9vb.

Cc:

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Gregory E. Abel
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(*service VIA USPS First Class Mail*)

Plant Manager
Hunter Power Plant
P.O. Box 569
Castle Dale, UT 84513

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BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter Of: PacifiCorp Hunter Power Plant Title V Operating Permit Permit No. 1500101002 Issued by United States Environmental Protection Agency	PETITION FOR OBJECTION

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR THE PACIFICORP HUNTER POWER PLANT, PERMIT NO. 1500101002

The Sierra Club hereby petitions the Administrator of the U.S. Environmental Protection Agency to object to Title V Operating Permit No. 1500101002 reissued on March 3, 2016, by the Utah Division of Air Quality (UDAQ) for the Hunter Power Plant operated by PacifiCorp Energy in Castle Dale, Utah.[2]

The Administrator must object to the issuance of the Title V Permit because, as demonstrated below and in Sierra Club's November 13, 2015 comment letter to UDAQ and associated exhibits,[3] the Permit does not meet the requirements of the Clean Air Act, the federal operating permit regulations, or the Utah State Implementation Plan (SIP). This Petition seeks an objection by the Administrator for the following reasons:

[2] The Permit is attached at Exhibit A. This petition is filed pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R §§ 70.7(f), 70.7(g), and 70.8(d).

[3] Sierra Club's November 13, 2015 comment letter to UDAQ on the Draft Title V Renewal Permit (hereinafter "Comment Letter") is attached as Exhibit B, along with all the associated exhibits, which are designated in this Petition by their original exhibit numbers (*e.g.*, "Ex. 1 to Comment Letter"). In addition to this Petition, Sierra Club explains in exceeding specificity in its Comment Letter what the legal requirements of the Utah SIP are with respect to PSD permitting, Approval Order requirements, and PALs; why the Hunter Title V permit and/or past permitting actions do not comply with those applicable requirements; and what needs to be done to assure compliance with those requirements. Sierra Club incorporates by reference all of the portions of its Comment Letter relating to each issue raised in this Petition and all of the associated exhibits. (Ex. B).

- The company constructed projects pertaining to boiler components and turbine upgrades in the late 1990's that should have been permitted pursuant to the applicable Prevention of Significant Deterioration (PSD) and Approval Order permitting requirements, including emissions limits reflecting Best Available Control Technology (BACT) and assurance of compliance with the national ambient air quality standards (NAAQS) and PSD increments, among other things.

- Utah's 10-year Plantwide Applicability Limits (PAL) limits for the Hunter Plant for SO2 and NOx set in 2008 were unlawful and invalid for several reasons. Significantly, EPA did not approve Utah's revised PSD rules that allow for ten-year PALs into the Utah SIP until 2011. Additionally, Utah set the PALs too high because they were based on actual emissions reflecting unpermitted modifications to each of the Hunter Plant's units that should have triggered PSD and BACT for SO2 and NOx, and correspondingly lower emissions limits. Moreover, the state should have set the PAL levels lower to reflect forthcoming regional haze requirements.

- The Permit fails to impose Utah Approval Order requirements, including BACT, on Hunter Unit 1 for unpermitted modifications in 2010, including the replacement of Unit 1's economizer, low temperature superheater, finishing superheater, and pulverizer components, as well as high pressure/intermediate pressure/low pressure turbine upgrades. This stands in stark contrast to Utah's Approval Order rules, and Utah's representations to EPA that the rule would require the application of BACT to such projects.

- UDAQ failed to satisfy its obligation to provide a meaningful response to approximately one hundred pages of Sierra Club's detailed comments on the crucial permitting issues discussed above.

I. INTRODUCTION

The Hunter Plant, located at Highway 10, Castle Dale, Utah 84513, includes three large coal-fired electric utility steam generating units that are designated as Units 1, 2 and 3. The plant releases an enormous amount of air pollution, including 4,238 tons per year (tpy) of SO2, 13,720 tpy of NOx, 1,0283,993 short tons per year of carbon dioxide (CO2),[4] 8,740 tpy of carbon monoxide (CO), 63.52 tpy of mercury compounds, 550 tpy of particulate matter up to 10 microns (PM10), 348 tpy of particulate matter up to 2.5 microns (PM2.5),[5] and others. Hunter is a "major

[4] EPA Air Markets Program Database, *available at* https://ampd.epa.gov/ampd/.
[5] 2011 Statewide Point Sources by County at p. 8, *available at* http://www.deq.utah.gov/ProgramsServices/programs/air/emissionsinventories/docs/2013/03Mar/2011%20StatewidePointSources-DetailByCounty.pdf (PM and CO); 2011 Statewide Hazardous Air Pollutants – Point Sources at 3,

stationary source" of SO2, NOx, PM10, CO, greenhouses gases and other pollutants under section 302 of the Clean Air Act, subject to the operating permit requirements of Title V of the Act.[6]

Individually and collectively, these pollutants contribute to global warming, acid rain, regional haze, pollution of surface waters, and other processes harmful to human health and the environment.[7] Significantly, pollution from the Hunter plant causes or contribute to visibility impairment in the crown jewels of America's national park and public lands system, including Capitol Reef National Park, Canyonlands National Park, Arches National Park, Bryce Canyon National Park, Zion National Park, Grand Canyon National Park, Black Canyon of the Gunnison Wilderness, and Mesa Verde National Park. The region is endowed with unparalleled landforms, stunning geologic features, irreplaceable scenic vistas, and a rich diversity of ecosystems. Visitors from across the nation and globe are drawn to these lands and their tourist dollars benefit state and local economies.

II. PETITIONERS

Sierra Club is the oldest and largest grassroots environmental group in the United States, with almost 650,000 members nationally, including over 4,000 members in Utah. Sierra Club's members live, work, attend school, travel, and recreate in and around areas affected by the

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available at http://www.deq.utah.gov/ProgramsServices/programs/air/emissionsinventories/docs/2013/03Mar/2011%20Statewide%20Point%20Sources-HAPsCountyDetails.pdf (mercury).

[6] Permit at 2 (Ex. A); *see* 42 U.S.C. at §§ 7661(2)(B), 7661a(a); see also 40 C.F.R. §§ 71.2, 71.3(a)(1).

[7] For example, Sierra Club's modeling shows the Hunter Plant's harmful SO2 emissions are projected to cause violations of the 1-hour SO2 NAAQS, whether based on allowable emissions, plantwide actual maximum hourly emissions in 2012, or even Hunter Unit 1's projects maximum allowable hourly SO2 emission rate upon the upgrade of control equipment. *See* Air Dispersion Modeling Analysis For Verifying Compliance with the One-Hour SO2 NAAQS: Hunter and Huntington Power Plants, Prepared by Lindsey Sears, April 28, 2014 (Ex. 50 to Comment Letter); SO2 Emissions Scenarios Modeled for the Hunter Power Plant and the Huntington Power Plant in the Air Dispersion Modeling Analysis for Verifying Compliance with the One-Hour SO2 NAAQS Conducted by Lindsey Sears, prepared by Vicki Stamper (Ex. 51 to Comment Letter); *see generally* Comment Letter at 98-100 (Ex. B).

Hunter Plant's emissions. These members enjoy and are entitled to the benefits of natural resources including air, water and soil; forests and cropland; parks, wilderness areas and other green space; and flora and fauna, all of which are negatively impacted by air pollutants emitted from the Hunter Plant.

III. PROCEDURAL BACKGROUND

EPA approved the Utah operating permit program on June 8, 1995, with an effective date of July 10, 1995.[8] The Division of Air Quality of the Utah Department of Environmental Quality is the Utah agency responsible for issuing Title V operating permits. The requirements of the Utah operating permit program are set forth in the Air Conservation Act, Utah Code Ann. § 19-2-109.1 et seq., and its implementing regulations, Utah Admin. Code r. 307-415-1 et seq.

The Title V Permit for the Hunter Plant was originally issued on January 7, 1998, and that permit was to expire January 7, 2003. PacifiCorp submitted a Title V permit renewal application in December of 2001, but UDAQ did not issue a draft Title V renewal for public comment until September 15, 2015,[9] after Sierra Club filed a mandamus action in state court against UDAQ to issue the renewal.[10]

On November 13, 2015, Sierra Club submitted extensive and timely[11] comments on the Draft Title V Renewal Permit to UDAQ, which are attached as Exhibit 2 to this Petition and incorporated in full.[12] The objections raised in this Petition were raised with specificity in Comment Letter.[13]

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[8] 60 Fed. Reg. 30,192, 30,194-95 (June 8, 1995).
[9] Draft Title V Renewal Permit for Hunter Power Plant (Ex. C).
[10] *See Sierra Club vs. Bryce Bird, et al.*, Civil Case No. 150905990 (3rd District Utah) (filed Aug. 21, 2015).
[11] Stipulated Order Regarding Deadline to Answer the Complaint at ¶ 2, *Sierra Club v. Bryce Bird, et al.*, (filed Oct. 15, 2015) (public comment period on Hunter Title V renewal permit deadline November 13, 2015).
[12] *See* Comment Letter (Ex. B).
[13] Comment Letter (Ex. B); 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

UDAQ issued a brief "Response to Public Comments" memorandum on January 11, 2016, which largely ignored Sierra Club's Comments,[14] and submitted the proposed Title V Permit to EPA.[15] EPA's 45-day review period ended on February 26, 2016.[16] EPA apparently did not object to the Permit, as UDAQ issued it in final form on March 3, 2016.[17] This Petition to Object is timely filed within 60 days of the conclusion of EPA's review period on February 26, 2016, and failure to raise objections.[18]

IV. LEGAL REQUIREMENTS

All major stationary sources of air pollution are required to apply for operating permits under Title V of the Clean Air Act.[19] Title V permits must provide for all federal and state regulations in one legally-enforceable document, thereby ensuring that all requirements are applied to the facility and that the facility is in compliance with those requirements.[20] Each operating permit must include, *inter alia*, enforceable "emission limitations and standards, including . . . operational requirements and limitations" to "assure compliance with all *applicable requirements* at the time of permit issuance . . . ."[21] "Applicable requirement" means: "(a) Any standard or other requirement provided for in the State Implementation Plan [including the requirements of the Prevention of Significant Deterioration (PSD) program in R307-405] . . ., [and](b) Any term or condition of any approval order issued under R307-401…" … [as well as]

[14] *See* January 11, 2016 Memorandum to PacifiCorp Hunter Title V Source File from Jennifer He, UDAQ, Response to Public Comments (hereafter "RTC") at 2-7 (Ex. D).
[15] Ltr from Jennifer He to Mike Owens, Re: Operating Permit# 1500101002 for PacifiCorp- Hunter Power Plant (dated Jan. 11, 2016) (Ex. E).
[16] E-mail from EPA Atty Brian Joffe to Andrea Issod (dated March 2, 2016) (Ex. F).
[17] Permit at 1 (Ex. A).
[18] 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).
[19] 42 U.S.C. § 7661a(a); Utah Code Ann. § 19-2-109.1 (2) & (3), Utah Admin. Code r. 307-415-6a(2).
[20] 42 U.S.C. §§ 7661a(a), 7661c(a); see also 40 C.F.R. § 70.6(a)(1).
[21] Utah Admin. Code r. 307-415-6a(1) (emphasis added); r. 307-415-5c(4) &(5); *see also* 42 U.S.C. §7661c (a); 40 C.F.R. § 70.1(b).

. . . "[a]ny standard or other requirement under rules adopted by the Board."[22] Under Utah's rules, "applicable requirement" plainly includes the requirement to obtain a PSD permit or Utah Approval Order, BACT emission limits, and limits necessary to ensure protection of air quality standards and increments. As EPA has explained:

> For a major modification of a major stationary source, applicable requirements include the requirement to obtain a preconstruction permit that complies with applicable new source review requirements (e.g., Prevention of Significant Deterioration, or PSD, requirements). …The PSD program analysis must address two primary and fundamental elements before the permitting authority may issue a permit: (1) an evaluation of the impact of the proposed new or modified major stationary source on ambient air quality in the area, and (2) an analysis ensuring that the proposed facility is subject to BACT for each pollutant subject to regulation under the PSD program. CAA § 165(a)(3),(4), 42 U.S.C. § 7475(a)(3), (4).[23]

UDAQ must determine the "applicable requirements" at the time of Title V permit issuance, determine whether the facility will be in compliance at the time of permit issuance, and if not, include a compliance schedule that sets forth enforceable steps leading to compliance with the applicable requirements.[24] Where a state or local permitting authority issues a Title V operating permit, EPA will object if the permit is not in compliance with any applicable requirements.[25] However, if the EPA does not object on its own, then "any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period

[22] Utah Admin. Code r. 307-415-3(2)(a) and (k).
[23] *In re Duke Energy Indiana Edwardsport Generating Station,* Permit No. T083-271 38-00003 at 2 (Dec. 13, 2011) ("*Edwardsport* Petition Order"), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/edwardsport_response2010.pdf; *see also In re Columbia Generating Station*, Petition No. V-2008-1, Order at 3 (EPA Adm'r, Oct. 8, 2009) ("*Columbia Station* Order"), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/columbia_county_response2008.pdf; *e.g.,* U.S. EPA Region 4 Objection, Proposed Part 70 Operating Permit, Florida Power Corporation Crystal River Plant, Permit No. 0170004-004-AV, at 7 (Nov. 1, 1999) ("*Crystal River* Objection") (Ex. G).
[24] Utah Admin. Code R307-415-1; 307-415-5c(3)(c), (4), (5) and (8); 307-415-6a(1); and 307-415-6c(1), (3), (4) and (5).
[25] 40 C.F.R. § 70.8(c).

to make such objection."[26] The Administrator must grant or deny a petition to object within 60 days of its filing.[27]

The Administrator "shall issue an objection . . . if the petitioner demonstrates to [the EPA] that the permit is not in compliance with the requirements of [the Clean Air Act]."[28] While the burden is on the petitioner to demonstrate to EPA that a Title V Permit is deficient, once that showing has been made, "EPA has no leeway to withhold an objection."[29]

V. GROUNDS FOR OBJECTION

A. The Administrator Must Object to the Hunter Permit Because It Fails to Include PSD Requirements For Major Modifications Constructed at Hunter in the Late 1990s.

Hunter's Title V permit is deficient because it does not include the "applicable requirements" of the PSD permitting program triggered by major modifications constructed during 1997-1999,[30] nor does the permit include an enforceable schedule of compliance to ensure the PSD permitting requirements are met.[31]

In August of 1997, PacifiCorp submitted a "Notice of Intent" (1997 NOI) permit application to UDAQ that identified numerous boiler projects and turbine upgrades to be completed on each Hunter unit in the 1997 through 1999 timeframe.[32] PacifiCorp's 1997 NOI

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[26] 40 CFR § 70.8(d); 42 U.S.C. § 7661d(b)(2).
[27] 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); Utah Admin. Code r. 307-415-8(4).
[28] 42 U.S.C. § 7661d(b)(2); *see also* 40 C.F.R. § 70.8(c)(1); *N.Y. Public Interest Group v. Whitman*, 321 F.3d 316, 333-34 (2nd Cir. 2003) ("NYPIRG") ("[O]nce NYPIRG demonstrated to the EPA that the draft permits were not in compliance with the CAA, the EPA was required to object to them.").
[29] Sierra Club v. EPA, 557 F.3d 401, 405 (6th Cir. 2009); see also NYPIRG, 321 F.3d at 332-34.
[30] For the purpose of this petition, we refer to the projects as completed in 1997-1999. There were two other projects identified by PacifiCorp as completed at Hunter Unit 3 in 1995 and 1996, but PacifiCorp did not request approval of these projects along with several other projects to be completed in 1997-1999 until its submittal of the 1997 NOI. *See* Ex. 1 to Comment Letter.
[31] Sierra Club raised all of these issues with specificity in its Comment Letter at 6-49 (Ex. B).
[32] *See* August 18, 1997 Request for Approval Order Modifications to Limit the Potential to Emit at the Hunter Plant ("1997 NOI"), at 1, Table 1 (Ex. 1 to Comment Letter). An "Approval Order" is Utah's regulatory term for an air

indicated that the hourly heat input capacity would increase significantly above the levels PacifiCorp identified as the "baseline hourly heat input" at all three Hunter units.[33]

To avoid applicability of PSD for these modifications, PacifiCorp requested limits on potential to emit of all three units ostensibly so that post-project emissions would not exceed the "PSD baseline emission inventory."[34] According to PacifiCorp, "the PSD baseline inventory was established at the time the Hunter Plant received a permit for Hunter units 3 and 4."[35] However, as discussed extensively in Sierra Club's comments, PacifiCorp's PSD baseline inventory was not based on actual emissions at the Hunter Plant, as required by the applicable PSD regulations in the Utah SIP. Instead PacifiCorp's baseline was much higher than actual emissions and appeared to be akin to allowable emissions.[36]

Under the PSD permitting program, major sources cannot make physical or operational changes that would result in a significant net emissions increase of any regulated pollutant unless a PSD permit is obtained.[37] The PSD regulations in effect under the Utah SIP at the time of the projects were based on the same applicability test in the EPA's 1980 federal PSD regulations.[38] That is, PSD applicability was based on an analysis of actual emissions prior to the projects to potential to emit after the projects. *See* definitions of "major modification," "net emissions increase," and "actual emissions" in Utah Air Conservation Regulation (UACR) R307-1-1

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pollution permit, and it can include requirements of Utah's Approval Order rules and/or Utah's PSD or nonattainment new source review rules. *See also* Comment Letter at 8-9, Table 1 (Ex. B).

[33] *See* Comment Letter at 10, Table 2 (Ex. B); *see also* 1997 NOI, Attachment, Tables with headings "Hunter Plant and Coal Prep Plant Annual Emissions Inventory Production Data Input Sheet for Calendar Year: EPA Baseline Emissions" and "Hunter Plant and Coal Prep Plant Annual Emissions Inventory Production Data Input Sheet for Calendar Year: Future Potential Emissions." (Ex. 1 to Comment Letter).

[34] *See* 1997 NOI at 1 (Ex. 1 to Comment Letter). Sierra Club explained the history of these projects, PacifiCorp's NOI, and Utah's Approval Orders in its Comment Letter at 6-12 (Ex. B).

[35] *Id.*

[36] UDAQ initially issued an Approval Order for these projects on November 20, 1997 (Ex. 2 to Comment Letter). On December 18, 1997, UDAQ issued a slightly revised Approval Order for these projects (Ex. 3 to Comment Letter). Subsequently, in 2005, UDAQ revoked the November 20, 1997 Approval Order (Ex. 4 to Comment Letter).

[37] 42 U.S.C. § 7475; 40 C.F.R. § 52.21(a)(2)(ii).

[38] 45 Fed. Reg. 52,676-52,748 (Aug. 7, 1980).

(1995).[39] Although EPA adopted revised rules for PSD applicability in 1992, EPA did not approve those rule changes into the Utah SIP until August 19, 2004.[40]

The PSD provisions do contain a limited exemption for projects that can be classified as routine maintenance, repair, and replacement.[41] However, PacifiCorp did not claim any of these projects to be routine maintenance, repair, or replacement in its August 18, 1997 NOI,[42] nor would these projects qualify for the exemption had PacifiCorp made such a claim.[43]

Although Utah did evaluate PSD applicability based on potential emissions after the projects in the 1997 Approval Order for the Hunter projects, Utah compared potential to emit to a "PSD Baseline Inventory" that was similar to an allowable emissions baseline and that was much higher than the Hunter Units' actual emissions during the baseline period. Sierra Club's Comment Letter provides calculations of an actual emissions baseline, using data from the Energy Information Administration's database and EPA's AP-42 emission factors. We calculated actual emissions baselines for the two year period prior to commencement of construction on the projects and also based on the highest 2-year average over the 5 years prior

[39] *See* Sierra Club's detailed explanation of the applicable definitions and provisions under the Utah SIP in its Comment Letter at 13-17 (Ex. B). The Utah air permitting rules have been recodified since 1997 and the PSD rules have been significantly revised, and EPA does not have the older versions of the SIP-approved on its SIP website. However, we know that in 1994, EPA approved the entire Utah Air Conservation Regulations as in effect January 27, 1992. *See* 40 C.F.R. § 52.2320(c)(25)(i)(A); 59 Fed. Reg. 35,036 (July 8, 1994)). Further, revisions to Utah's definitions and PSD provisions effective in 1994 were approved by EPA in 1995. S *ee* 40 C.F.R. § 51.2320(c)(28)(i)(A) and (B); 60 Fed. Reg. 22,277 (May 5, 1995), and 40 C.F.R. § 51.2320(c)(31)(i)(A) and (B); 60 Fed. Reg. 55,792 (Nov. 3, 1995). Since the 1995 version of the rules in effect on January 1, 1995 were available on Utah's Department of Administrative Services website at http://www.rules.utah.gov/publicat/codeudt.htm#U1995, we are citing to this version of Utah's PSD rules as reflective of the PSD permitting requirements that were approved as part of the Utah SIP at the time of the Hunter 1997 NOI. A copy of Utah Air Conservation Rules R307-1 as in effect on January 1, 1995 is attached as Ex. 5 to the Comment Letter.

[40] 69 Fed. Reg. 51,368-51,370 (Aug. 19, 2004); *see also* 40 C.F.R. § 52.2320(c)(58)(i)(A); Section VIII.A.4. of the Utah SIP. See the detailed explanation of the applicable definitions and provisions under the Utah SIP in Sierra Club's Comment Letter at 13-17 (Ex. B).

[41] Definition of "major modification" in UACR R R307-1-1(1) (1995); 40 C.F.R. § 52.21(b)(3)(iii)(a) (1980). *United States v. So. Ind. Gas & Elec. Co.*, 245 F. Supp. 2d 994, 1009 (S.D. Ind. 2003) ("Giving the routine maintenance exemption a broad reading could postpone the application of NSR to many facilities, and would flout the Congressional intent evinced by the broad definition of modification."). Comment Letter at 17-20 (Ex. B) discusses the routine maintenance exemption

[42] *See* Ex. 1, 6, 8-14 to Comment Letter.

[43] *See* Comment Letter at 17-20 (Ex. B).

to the commencement of construction on the projects.[44] This analysis clearly showed that the PSD Baseline Inventory used by PacifiCorp and relied upon by UDAQ in issuing its 1997 Approval Order was significantly higher than the actual emissions for Hunter Unit 1, 2, and 3 during the baseline period for all of the pollutants that we determined actual emissions for (*i.e.,* particulate matter, SO2, NOx, and CO).[45]

An evaluation of the emissions increases from the 1997-1999 projects at the Hunter units based on a comparison of actual emissions (as shown in Table 3 of Sierra Club's Comment Letter) to PacifiCorp's requested potential to emit shows that the 1997-1999 projects should have been projected to result in a significant emission increase of SO2, NOx, PM and other pollutants at each Hunter unit. This is discussed in detail in the Comment Letter at 27 to 30, and in Table 6 of our comment letter which we have provided below.

[44] The basis for the actual emissions calculations are provided in detail in Comment Letter at 20-27 and in Ex. 24. We evaluated the highest 24-month period of emissions over the 5 year period immediately preceding the projects based on EPA's statement in the WEPCO rulemaking that, for electric utility steam generating units, EPA considered any two year period of the five years before a project to be representative of normal source operations for such units. 57 Fed. Reg. 32,314, 32,323 (July 21, 1992). We determined that the 24-month period ending in November 1995 had the highest SO2, NOx and CO emissions. Comment Letter at 25 (Ex. B).

[45] Comment Letter at 25-27, and as demonstrated in Table 4.

Table 6: Proper Evaluation of Emission Increases for Hunter Projects Announced in 1997 NOI: Actual Emissions of the Hunter Units 1-3 Compared to Potential to Emit After the Hunter Projects[46]

Total Hunter Units 1, 2 and 3				
Pollutant	**PSD Significant Emission Rate, tpy**	**Annual Average Actual emissions for 24-month period ending Nov 1995, tpy**	**PacifiCorp's Post-Change Potential Emissions, tpy**	**Emission Increase/Decrease**
SO2	40	7,019	10,253	+ 3,234 tpy
NOx	40	20,955	26,981	+ 6,026 tpy
TSP (PM)	25	1,187	2,124	+ 937 tpy
PM10 (Filterable)	15	867	1,566	+699 tpy
CO	100	1,084	1,305	+221 tpy
Hunter Unit 1				
SO2	40	2,857	4,107	+ 1,250 tpy
NOx	40	7,348	8,801	+1,453 tpy
TSP (PM)	25	463	858	+395 tpy
PM10 (Filterable)	15	310	579	+ 269 tpy
CO	100	368	429	+ 61 tpy
Hunter Unit 2				
SO2	40	2,641	4,107	+ 1,466 tpy
NOx	40	6,901	8,801	+ 1,900 tpy
TSP (PM)	25	438	858	+ 420 tpy
PM10 (Filterable)	15	293	579	+ 286 tpy
CO	100	344	429	+85 tpy
Hunter Unit 3				
SO2	40	1,521	2,039	+518 tpy
NOx	40	6,706	9,379	+2,673 tpy
TSP (PM)	25	286	408	+122 tpy
PM10 (Filterable)	15	263	408	+145 tpy
CO	100	372	447	+75 tpy

To determine net emissions increase, Sierra Club evaluated all other contemporaneous emission increases that PacifiCorp identified in its 1997 NOI, which were related to the increase

[46] *Id.* at Table 6 and Ex. 1 to Comment Letter (for PacifiCorp's Post-Change Potential Emissions) and Ex. 24 to Comment Letter (for annual average actual emissions for 24-month period ending November 1995).

in coal burned.[47] There were no creditable, contemporaneous emissions decreases at the Hunter Units identified in the 1997 NOI or that Sierra Club was otherwise aware of. Sierra Club found that, not only should the 1997-1999 projects been projected to result in a significant emissions increase of several regulated pollutants at each of the Hunter Units, but as shown in Table 8 of the Comment Letter, reprinted below, the projects also should have been projected to result in a significant net emissions increase of SO2, NOx, PM and other pollutants.

Table 8. Determination of Net Emissions Increase Considering Contemporaneous Emission Increases and Decreases,[48] Based on Proper Actual-to-Potential Test for Hunter Units 1-3[49]

Pollutant	PSD Significant Emission Rate, tpy	Baseline Emissions (Actual Emissions for 24-month period ending Nov 1995 for Hunter Units 1-3 + PacifiCorp's baseline emissions for other units), tpy	Post-Change Potential Emissions, tpy	Emission Increase/Decrease
SO2	40	7,019	10,253	+ 3,234 tpy
NOx	40	20,955	26,981	+ 6,026 tpy
TSP (PM)	25	1,541	2,525	+ 984 tpy
PM10 (Filterable)	15	1,069	1,789	+ 720 tpy
CO	100	1,084	1,305	+221 tpy

EPA recently recognized that Utah had been applying faulty PSD applicability analyses with respect to baseline emissions in its draft Title V permitting action for the Deseret Power Electric Cooperative's Bonanza Plant.[50] EPA highlighted that Utah's evaluation of the Ruggedized Rotor Project "failed to use actual pre-project emissions as the baseline for

[47] As discussed in Comment Letter at 31-33 (Ex. B).
[48] *Id.* at 31-34.
[49] Moreover, a review of actual emissions after the projects shows that significant actual emissions increases of SO2, NOx, and PM10 did occur at the Hunter Plant after the projects. Comment Letter at 36-41 (Ex. B).
[50] *See* April 28, 2014 Statement of Basis, Title V Permit to Operate, Draft Permit No. V-UO-000004-00.00, Deseret Power Electric Cooperative, Bonanza Power Plant, Appendix A at pp. 27-28, 29, 33-36 (Ex. H). In particular, EPA made clear that its "2001 PSD permit decision incorporating the rationale of [UDAQ's Modified Source Plan Review] was defective...." *Id.* at 36.

determining the amount of increase."[51] That is the same major deficiency with Utah's 1997 Approval Order for the Hunter plant projects.

Further, after issuance of the 1997 Approval Order with limits on potential to emit intended to keep the projects at the Hunter units from triggering PSD permitting requirements, UDAQ almost immediately relaxed the limits it had imposed in a 1998 Title V operating permit by incorporating carte blanche exemptions from those limits for startup, shutdown, maintenance/planned outage, and malfunction.[52] Federal and state PSD regulations do not allow these limits to be relaxed unless the projects undergo further permitting review as though construction had not yet commenced.[53] Thus, even if the applicability test that Utah applied was lawful - which it clearly was not - the 1997 Approval Order and associated limits on potential to emit of the modified Hunter units became ineffectual due to the relaxation of those emission limits in the 1998 Title V operating permit for the Hunter plant.[54] Once the Title V operating permit was issued in January 1998, the projects at the Hunter plant should have been permitted as though construction had not yet commenced.[55]

Despite the extensive comments provided by Sierra Club to Utah on the draft Title V permit for Hunter regarding these issues, and UDAQ's obligation to respond to substantive comments,[56] UDAQ unlawfully claimed that "any concerns regarding previous permits should

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[51] *Id.*
[52] *Id.* at 42-47. *See also* Title V Operating Permit for Hunter Power Plant, Permit Number 1500101001, issued January 7, 1998 (*e.g.*, Condition II.B.3.a, imposing NOx limit for Unit 3 except with exceptions for periods of startup, shutdown, maintenance/planned outage, or malfunction) (Ex. 25 to Comment Letter).
[53] 40 C.F.R. § 52.21(r)(4); UACR 307-1-3.1.11 of the Utah SIP (1995, as in effect under Clean Air Act § 110 at the time of the 1997 Approval Order and 1998 Title V Permit for the Hunter Plant).
[54] *See* Sierra Club Comment Letter at 47 (Ex. B)*; see also* 40 C.F.R. §52.21(r)(4), 45 Fed. Reg. 52,676-52,748 at 52,689 (Aug. 7, 1980).
[55] 40 C.F.R. §52.21(r)(4); UACR 307-1-3.1.11 of the Utah SIP (1995, as in effect under Clean Air Act § 110 at the time of the 1997 Approval Order and 1998 Title V Permit for the Hunter Plant). This issue is described in detail in Sierra Club's Comment Letter at 44-47.
[56] *See supra* Section V.F.

have been raised during the public comments period" for the prior permit and thus UDAQ provided no response to these comments.[57]

For all of these reasons, EPA must object to the Hunter Title V Permit because it fails to include PSD permitting requirements including best available control technology (BACT),[58] lacks terms and conditions necessary to adequately protect NAAQS and PSD increments for SO2, NOx, CO and particulate matter, and fails to include a schedule of compliance to ensure that the Hunter Plant is brought into compliance with applicable PSD permitting requirements.

B. The Administrator Must Object to the Hunter Title V Renewal Permit Because It Includes 10-Year Plantwide Applicability Limits (PALs) for SO2 and NOx that Are Unlawful and Invalid.

In 2008, UDAQ issued an Approval Order to PacifiCorp for installation and/or upgrade of SO2, NOx and PM controls at Units 1 and 2 and NOx controls at Unit 3 that also included 10-year PSD Plantwide Applicability Limits (PALs) for SO2 and NOx.[59] EPA adopted PAL provisions as part of 2002 changes to its PSD permitting regulations.[60] The establishment of a PAL for a particular pollutant allows a source to make physical or operational changes to existing emission units without having to individually review those changes for PSD

[57] *See* RTC at 2-3 (Ex. D).

[58] BACT is determined on a case-by-case basis in the context of issuing a PSD permit. Although UDAQ has not claimed that the Hunter units are already subject to or meeting BACT, Sierra Club provided extensive comments on what pollution controls would likely constitute BACT for the Hunter Units in its Comment Letter at 79-95. Sierra Club demonstrated that the currently pollution controls and/or emission limits of the Title V permit would not constitute BACT for the Hunter Units 1, 2 or 3. Although the Title V permit identifies the authority for the SO2, NOx, and PM limits, including the SO2 and NOx PALs as "R307-401-8(1)(a) [BACT]," the permit records for the Hunter Plant do not indicate that any recent evaluation of BACT was conducted for the Hunter units for any pollutant except CO in 2008. *See* November 27, 2007 NOI, Sections 5.0 and 6.0, at 5.1-6.3, pdf 21-27 (NOI only contains a BACT analysis for one pollutant, carbon monoxide) (Ex. 37 to Comment Letter); *see also* UDAQ Modified Source Plan Review, January 25, 2008, for 2008 Approval Order, Sections 1.3 and 6.0, at 8, 20-24 (confirming that no BACT review was conducted for SO2, NOx, or PM or any other pollutants other than CO) (Ex. 38 to Comment Letter).

[59] March 13, 2008 Approval Order (DAQE-AN0102370012-08) (Ex. 36 to Comment Letter). Notably, the Title V permit for the Hunter Plant does not identify Approval Order DAQE-AN0102370012-08 as the underlying authority of the PAL provisions. Instead, the permit states that the PAL condition originated from Approval Order DAQE-AN102370022-14, however, no PAL limitations "originated" in the 2014 Approval Order. *See* June 26, 2014 Approval Order DAQE-AN102370022-14 (Ex. 57 to Comment Letter).

[60] 67 Fed. Reg. 80,186, 80,284-89 (Dec. 31, 2002).

applicability for the PAL pollutant as long as total plantwide emissions remain under the level of the PAL.[61] However, the PALs established by UDAQ for the Hunter Plant were unlawful, invalid and ineffective for the three main reasons described below,[62] and must be removed from the Title V permit.[63]

First, UDAQ lacked the legal authority to impose ten-year PALs in the 2008 Approval Order because EPA did not approve Utah's revised PSD rules that allow for ten-year PALs into the Utah SIP until 2011, which was three years after Utah's issuance of the 2008 PALs for the Hunter Plant.[64] EPA told UDAQ as much in its comments on UDAQ's draft Approval Order and PAL limits for the Hunter Plant proposed in 2007. Specifically, EPA informed UDAQ that "[u]ntil EPA approves Utah's NSR reform rules (including PAL provisions) into the SIP, PacifiCorp cannot rely on the ten-year PAL provisions in this permit to avoid federal enforcement of current SIP requirements for major NSR/PSD, in the event of a future major modification at the facility."[65] Utah's SIP is not considered legally amended until revisions are approved by EPA and cannot be changed or unilaterally altered by a state, even where a SIP revision is pending.[66] Thus, the PALs established in the 2008 Approval Order were not lawfully established.

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[61] 40 C.F.R. § 52.21(aa)(1)(ii). Note that this discussion pertains to the PSD permitting regulations only, as Utah has adopted a provision that a PAL does not exempt a source from the requirement to obtain an Approval Order as will be discussed further below.

[62] Sierra Club raised all of these issues with reasonable specificity in its Comment Letter at 75-78 & 105-15 (Ex. B).

[63] Condition II.B.1.i of the Hunter Title V renewal permit (Ex. 1) includes PALs for SO2 and NOx of 7,187 tons per year (tpy) and 19,319 tpy, respectively.

[64] 76 Fed. Reg. 41,712-717 (July 15, 2011); *see also* 40 C.F.R. § 52.2320(c)(69)(i)(B) (effective August 15, 2011).

[65] *See* April 5, 2007 letter from EPA to UDAQ re EPA Region 8 Comments on Intent-to-Approve (Draft PSD Permit) for PacifiCorp's Hunter Power Plant, Enclosure at 5 (Ex. 56 to Comment Letter).

[66] *Gen. Motors Corp. v. United States*, 496 U.S. 530, 540 (1990); *Sierra Club v. TVA*, 430 F.3d 1337, 1346-47 (11th Cir. 2005) ("If a state wants to add, delete, or otherwise modify any SIP provision, it must submit the proposed change to EPA for approval … and an unapproved revision of any part of an SIP is invalid under § 110(i) of the Clean Air Act.") (citing *Train v. Natural Res. Def. Council, Inc.*, 421 U.S. 60, 92(1975) ("a polluter is subject to existing requirements until such time as he obtains a variance, and variances are not available under the revision authority until they have been approved by both the State and the Agency."); *United States v. Ford Motor Co.*, 814 F.2d 1099, 1103 (6th Cir. 1987) (holding that "invalidation of a SIP on technical grounds by a state court . . . cannot

Notwithstanding that Utah lacked authority under the SIP to establish 10-year PALs, the PALs were not established in accordance with the PAL provisions of the federal and SIP-approved PSD regulations. PALs must be premised on baseline actual emissions[67] which must be adjusted downward to exclude any non-compliant emissions.[68] As discussed above, the Hunter units should have been subject to PSD permitting and BACT requirements for SO2 and NOx for the projects constructed in 1997-1999. Ther efore, the actual emissions of the units from the time frame of 2002 to 2007 upon which the SO2 and NOx PALs were based,[69] should have been lower due to the units being subject to SO2 and NOx BACT. *See infra.*

Moreover, the PAL regulations required UDAQ to "specify a reduced PAL level(s) . . . to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the reviewing authority is aware of prior to issuance of the PAL permit."[70] At the time that the PAL permit was issued, UDAQ was aware that Hunter Units 1 and 2 would be subject to NOx best available retrofit technology (BART) requirements and SO2 limitations under the regional haze plan requirements.[71] Indeed, in a June 13, 2008 public notice for the Utah's proposed regional haze SIP, Utah announced a determination that PacifiCorp's pollution

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be given effect, because . . . revisions and variances of properly promulgated SIPs require EPA approval"); 40 C.F.R. § 51.105 ("Revisions of a plan, or any portion thereof, will not be considered part of an applicable plan until such revisions have been approved by [EPA] in accordance with this part."); *see also Safe Air for Everyone v. United States EPA*, 475 F.3d 1096, 1105 (9th Cir. 2007) (once approved by EPA, the SIP becomes "federal law, not state law" and cannot "be changed unless and until EPA approved any change. Consequently, the state's interpretation of the regulations incorporated into the SIP, even if binding as a matter of state law, [are] not directly dispositive of the meaning of the SIP.").

[67] 40 C.F.R. § 52.21(aa)(2)(i) and (b)(48), incorporated by reference into Utah Admin. Code R307-405-21(1) and R307-405-3(1) (effective as part of the EPA-approved SIP on August 15, 2011 (76 Fed. Reg. 41.712-717 (July 15, 2011)).

[68] 40 C.F.R. § 52.21(b)(48)(i)(b), incorporated by reference into Utah Admin. Code R307-405-3(1) (effective as part of the EPA-approved SIP on August 15, 2011).

[69] *See* November 27, 2007 Hunter Power Plant Notice of Intent, at Table HTR-1 at 43-48 (Ex. 37 to Comment Letter).

[70] 40 C.F.R. § 52.21(aa)(6), incorporated by reference into Utah Admin. Code R307-405-21(1), approved into the SIP at 76 Fed. Reg. 41,712 (July 15, 2011).

[71] *See* 40 C.F.R. § 51.308(e); § 51.309. The statutory deadline for Utah and all other states to submit regional haze plan submittals to EPA for SIP-approval was December 17, 2007. *See* 74 Fed. Reg. 2,392, 2,393 (Jan. 15, 2009).

control projects at Hunter Units 1 and 2 satisfied BART.[72] Although EPA did not approve those controls as meeting BART,[73] EPA did subsequently propose to approve Utah's BART alternative for the low NOx burner/overfire air NOx pollution controls and limits (including the NOx controls at Hunter Unit 3).[74] EPA also concurrently proposed a rulemaking to impose a NOx BART FIP on Hunter Units 1 and 2 that would be based in part on the low NOx burner and overfire air NOx controls the company installed under its 2008 Approval Order.[75]

Regardless of which option is selected by EPA, the fact remains that at the time UDAQ established the PALs for the Hunter Plant, it was aware that there would be future regional haze requirements affecting the allowable emission rates of at least Hunter Units 1 and 2. Accordingly, UDAQ should have "specif[ied] a reduced PAL level" for SO2 and NOx to reflect compliance with those requirements to become effective on the compliance date of those requirements. Thus, the PAL for SO2 should have been adjusted from 7,187 tons per year to 5,562 tons per year after the scrubber upgrades at Units 1 and 2, and the NOx PAL should have been adjusted from 19,319 tpy to 15,501 tpy after the installation of low NOx burners and overfire air at Hunter Units 1 and 2.[76]

UDAQ's limited response to Sierra Club's extensive comments submitted on the PALs were that (1) any concerns regarding previous permits should have been raised during the public comment period and (2) the comments "pertain to new source review" and that the "comments are not applicable to [a] Title V renewal permitting action."[77] As discussed *supra*, UDAQ's

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[72] *See* Utah Department of Environmental Quality, Air Quality, R307-110-28 Regional Haze, Notice of Proposed Rule (Amendment), Filed 6/13/2008, published in July 1, 2008 Utah State Bulletin, Vol. 2008, No. 13 (Ex. 86 to Comment Letter).
[73] 77 Fed. Reg. 74,355-74,372 (Dec. 14, 2012).
[74] 81 Fed. Reg. 2,004-2,052 (Jan. 14, 2016).
[75] *Id.*
[76] *See* Comment Letter at 105-11 (Ex. B).
[77] *See* RTC at 4-5 (Ex. D).

response is legally inadequate because it failed to respond to Sierra Club's substantive comments.

Moreover, the Title V renewal was Sierra Club's first legitimate opportunity to address the 2008 Approval Order and the PALs in the context of a Title V permit for the Hunter Plant.[78] UDAQ ignores the fact that EPA did state during the public comment period on the draft PAL permit that Utah did not have authority to establish 10-year PALs until EPA had given approval of the Utah SIP-provisions allowing for 10-year PALs.[79] Further, the PALs in the Title V permit set forth a PSD applicability test for future projects at the Hunter units that may occur through the March 13, 2018 effective date of the PALs.[80] Sierra Club's comments on this issue go well beyond questioning of a past permit action, because these PAL provisions in the Hunter Title V permit define the mechanism for whether PSD is triggered for SO2 or NOx in the future.[81]

Additionally, this Title V renewal permit is the first time that the public had notice and opportunity to comment on the incorporation of the PAL provisions into the Title V permit. As discussed previously, the original Hunter Title V permit expired by its own terms on January 7,

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[78] As addressed above and more specifically in Section VI.F of this Petition, these PAL issues relate to New Source Review and PSD requirements triggered in the past that remain applicable requirements that must be addressed in a Title V renewal permit context. *See, e.g.*, In re: Tennessee Valley Authority, Paradise Fossil Fuel Plant, Drakesboro, Kentucky, Petition No. IV-2007-3, Order Responding to Petition to Object to Title V Permit at 5 (July 13, 2009) ("*TVA Paradise* Objection") at 1-2, 5, 14 (addressing historic alleged PSD modifications), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/tvaparadise_decision2007.pdf; *NYPIRG*, 427 F.3d at 177-83 (granting Title V petition filed in 2002 to address alleged PSD modifications made in 1983-85); *Columbia Station* Order at 8-10; *In the Matter of Monroe Electric Generating Plant, Entergy Louisiana, Inc.*, Proposed Operating Permit, Petition No. 6-99-2, Order Responding to Petitioner's Request That the Administrator Object to Issuance of a State Operating Permit, at 2, 6-24 (EPA Adm'r. June 11, 1999) (granting Title V petition based PSD issues), (" *Monroe* Order"), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/entergy_decision1999.pdf; May 20, 1999 Letter from John S. Seitz, Director of Office of Air Quality Planning and Standards, to Mr. Robert Hodanbosi and Mr. Charles Lagges, STAPPA/ALAPCO, Enclosure A at 2-3 (Ex. 85 to Comment Letter).

[79] *See* April 5, 2007 letter from EPA to UDAQ re EPA Region 8 Comments on Intent-to-Approve (Draft PSD Permit) for PacifiCorp's Hunter Power Plant, Enclosure at 5 (Ex. 56 to Comment Letter).

[80] Hunter Title V Permit, Condition II.B.1.i (Ex. A).

[81] Moreover, in the context of a Title V renewal permit, prior permitting actions that are relevant to the existence or application of applicable requirements are within the scope of permit review. *See generally infra* at Section VI.

2003,[82] and it appears that PacifiCorp was allowed to continue operations under the "permit application shield" provisions of the Title V program.[83] However, in 2008, without any public notice, UDAQ administratively incorporated the PAL provisions from the 2008 Approval Order into the Hunter Plant's expired Title V operating permit.[84] This amendment to an expired permit was not lawful because where a timely and complete application has been submitted, "***all of the terms and conditions of the permit*** . . . shall remain in effect until renewal or denial."[85] The plain language of this provision cannot be plausibly read as allowing for the creation of a new operating permit through amendments or modifications of terms and condition of an expired permit.[86]

Further, irrespective of whether an expired Title V permit can be modified, UDAQ incorporated the PAL provisions into the Hunter Title V permit through an administrative permit amendment, which was not allowed because the 2008 Approval Order did not undergo "enhanced new source review" procedures that were "substantially equivalent" to Title V permit issuance and modification procedures.[87] At a bare minimum, these procedures mandated that the

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[82] January 7, 1998 Title V Operating Permit for the Hunter Plant. (Ex. 25 to Comment Letter).

[83] Utah Admin Code R307-415-5a(2)(e).[84] Utah Admin. Code R307-415-7e(3)(a) ("The director . . . may incorporate such changes without providing notice

[84] Utah Admin. Code R307-415-7e(3)(a) ("The director . . . may incorporate such changes without providing notice to the public or affected States provided that the director designates any such permit revisions as having been made pursuant to this paragraph."). *See* Hunter Title V Permit Issued 3/3/2016 (Ex. 1) at 3, Operating Permit History.

[85] Utah Admin. Code R307-415-7c(3) (emphasis added). As used in this rule, the phrase "terms and conditions of the permit" clearly means the terms and conditions of the Title V permit as it existed at the time a "timely and sufficient" renewal application was submitted.

[86] This is confirmed by reference to Utah Admin. Code R307-415-7b, which prohibits a Title V source from operating without "a permit issued under these rules." Utah Admin. Code R307-415-7b(2) clarifies that when a Title V permit expires, a Title V source, technically and legally, no longer has "an operating permit." Nonetheless, rule (b)(2) expressly absolves such source from violations for operating without such a permit until the Director takes final action on a permit application.

[87] Utah Admin. Code R307-415-7e(1)(e) provides that an " 'administrative permit amendment' is a permit revision that . . . [i]ncorporates into the operating permit the requirements from an approval order issued under R307-401, ***provided that the procedures for issuing the approval order were substantially equivalent to the permit issuance or modification procedures of R307-415-7a through 7i*** and R307-415-8, and compliance requirements are substantially equivalent to those contained in R307-415-6a through 6g . . . ." (emphasis added). *See also* 40 C. F.R. § 70.7(d)(v) (allowing for incorporation of the requirements of preconstruction review permits authorized under an EPA-approved program, but only where such a program "meets procedural requirements substantially equivalent to

2008 Approval Order's public notice reveal that an opportunity to comment on that Title V permitting action existed, but UDAQ's public notice failed to make that clear because it did not mention enhanced New Source Review procedures and did not describe any of the Title V permitting changes anticipated to be made.[88]

The flaws in the public notice for the 2008 Approval Order violated Utah Admin. Code R307-415-7i(2) and Utah Admin. Code R307-415-7e(1)(e) and rendered the 2008 Hunter administrative amendment unlawful. More importantly, those flaws denied the general public, including Sierra Club, lawful and adequate notice that a Title V action was taking place in 2008.

Finally, the PAL provisions in the Hunter permit are not limited to the past because they define the mechanism for whether PSD is triggered for SO2 or NOx in the future.[89] For all of the above reasons, EPA must object to the PAL provisions in the Hunter Title V permit.

C. The Administrator Must Object to the Hunter Title V Renewal Permit Because It Fails to Include Approval Order Requirements, including BACT, for Unpermitted Modifications at Hunter Unit 1 in 2010.

The Title V permit does not identify, include and assure compliance all applicable requirements because PacifiCorp performed unpermitted "modifications" at Hunter Unit 1 in 2010 without obtaining a required Approval Order and without the application of BACT for SO2, NOx and PM for those modifications, which were applicable requirements under the Utah

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the requirements of §§ 70.7 and 70.8 of this part that would be applicable to the change if it were subject to review as a [Title V] permit modification, and compliance requirements substantially equivalent to those contained in § 70.6 of this part. . . ."); 57 Fed. Reg. 3,225 (July 21, 1992) (Title V operating permit final rule, wherein EPA provided it would allow for administrative amendments of Title V permits to incorporate requirements for permits issued under state NSR programs but only "if the NSR program is enhanced as necessary to meet requirements substantially equivalent to the applicable part 70 requirements and clarifying that "[c]hanges that meet the requirements for minor permit modifications may be made under procedures substantially equivalent to those in § 70.7(e) (2) or (3). Changes that do not meet the requirements for minor permit modifications must be made under procedures substantially equivalent to those for permit issuance or significant permit modifications."); November 7, 1995 Letter from EPA's Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, to STAPPA/ALAPCO's Mr. William Becker, Executive Director (Ex. 93 to Comment Letter).

[88] *See* Comment Letter at 119-122 (Ex. B); February 3, 2008 Salt Lake Tribune Public Notice for 2008 Hunter Notice of Intent and Approval Order at 1 (Ex. 90 to Comment Letter).

[89] Hunter Title V Permit, Condition II.B.1.i (Ex. A).

SIP. The 2010 modifications and the Hunter Unit 1's operation thereafter without an Approval Order and without applying BACT have resulted in continuing violations of the Utah SIP. Accordingly, EPA must object to the Title V permit because it fails to identify and include all applicable requirements and fails to include a schedule of compliance to bring Hunter Unit 1 into compliance with Approval Order and BACT requirements.[90]

1. Applicable Utah SIP-Approved Air Permitting Rules and Procedures

Under Utah's SIP-approved rules, an Approval Order imposing BACT limits and meeting other Approval Order requirements must be obtained before the commencement of a planned modification whenever there is a reasonable expectation of any emission increase.[91] Utah SIP's Approval Order Rule is broadly applicable whenever there is a reasonable expectation of any emission increase at the time a modification to an installation is planned.[92] Although the

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[90] Sierra Club raised all of these issues with reasonable specificity in its Comment Letter at 49-73 (Ex. B).

[91] The air permitting rule in effect in the EPA-approved Utah SIP at the time of the 2010 Unit 1 work is set forth at Utah Air Conservation Regulation (UACR) R307-1-3 et seq. (Approval Order Rule). The pertinent portions of this rule, which, among other things, implements Utah's minor new source review (NSR) program, were approved by EPA as part of the Utah SIP in 1994, 1995 and in 2006. *See* 59 Fed. Reg. 35,036, 35,043 (July 8, 1994); 60 Fed. Reg. 22,277, 22,281 (May 5, 1995); *see also* 40 C.F.R. §§ 52.2320(c)(25)(i)(A) and (c)(28)(i)(A); EPA's Reproduction of SIP-Approved Portions of UACR R307-1-3 et seq. (Ex. 32 to Comment Letter). These Approval Order air permitting rules are currently codified in Utah Admin. Code R307-401-1 et seq., but that most recent codification was only partially approved by the U.S. EPA as part of the Utah SIP on February 6, 2014, *see* 79 Fed. Reg. 7,072-77 (Feb. 6, 2014), and that approval was not effective until March 10, 2014. For the purpose of addressing the 2010 unpermitted Hunter Unit 1 projects, this Petition cites to the older version of Utah's SIP because, as a general matter, those were the enforceable rules of the EPA-approved SIP applicable to the actions in question. In 2006, EPA approved a recodification of Utah's definitions in Utah Admin. Code R307-101-2 that include pertinent definitions to the Approval Order requirements. *See* 71 Fed. Reg. 7,679, 7,679-82 (Feb. 14, 2006); 40 C.F.R. § 52.2320(c)(59)(i)(A). Sierra Club provided a detailed explanation of the applicable definitions and regulations of the Approval Order requirements of the Utah SIP in its Comment Letter at 50-55 (Ex. B). UDAQ's website confirms that "[t]hese permits [Approval Orders] may include limits on both construction and operation activities. ***A person must apply for an Approval Order before starting construction or operation of any emitting equipment***." UDAQ Website at Division of Air Quality, Permitting Branch, Air Permit Requirements, General Permitting Information at (http://www.deq.utah.gov/Permits/air /index.htm) (Ex. 33 to Comment Letter) (emphasis added).

[92] *See* Comment Letter at 53 (Ex. B); Utah State Bulletin, July 15, 2006, Vol. 2006, No. 14 at 42-43, 45 (stating that "Utah requires all sources, both major and minor, to apply best available control technology (BACT) when an emission unit is modified. Therefore, even when a modification is not considered a major modification, the source must still apply BACT.") (Ex. 34 to Comment Letter); February 24, 2006 Memorandum from UDAQ's C. Delaney and J. Schubach to Utah Air Quality Board, Enclosing NSR Reform Rules Comments and Responses at 2 (Ex. 35 to Comment Letter); UACR R307-1-3.1.8.A of the EPA-approved Utah SIP; definition of "Best available control

Approval Order Rule does provide for several narrow exemptions, none of these exemptions are applicable here and none of were invoked by UDAQ or the owners or operators of the Hunter Unit 1 at the time the 2010 modifications were performed.[93] Equally significant, while a lawfully established PAL may exempt modifications at a source from review under PSD regulations, PALs may not be relied on to exempt modifications at a source from the requirement to obtain an Approval Order.[94]

2. Unpermitted Modifications at Hunter That Triggered Approval Order Rule

On November 27, 2007, PacifiCorp filed a Notice of Intent (2007 NOI)[95] seeking, *inter alia*, authorization for the installation of pollution control equipment on all three of the Hunter units,[96] the imposition of PAL limits for SO2 and NOx, and the installation of other identified projects at the Hunter Plant.[97] The 2007 NOI provided a list of proposed Unit 1 projects[98] and

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technology" in Utah Admin. Code R307-101-2 of the EPA-approved Utah SIP; and UACR R307-1-3.1.8.B. of the EPA-approved Utah SIP. Pursuant to this rule, Approval Orders impose operational conditions upon facilities, including emission limitations to comply with BACT and other applicable emission limitations, requirements to operate air pollution control technology, and emissions monitoring requirements.

[93] Notably, the Utah Approval Order rule, unlike the PSD rule, does not include any exemption for routine maintenance, repair, or replacement.

[94] Utah Admin. Code R307-401-13 (2010). Further, UDAQ clearly stated in the context of responding to comments on its PSD rule revisions adopting the PAL provisions:

> The Utah State NSR permitting rule [the Approval Order Rule] is applicable to any changes at a source. ***Any emission increases at a source will be reviewed under the State rule even in cases where the change is exempt from Federal NSR major source review under a PAL permit.***

February 24, 2006 Memorandum from UDAQ's C. Delaney and J. Schubach to Utah Air Quality Board, Enclosing NSR Reform Rules Comments and Responses at 11 (Ex. 35 to Comment Letter) (emphasis added). *See also* Utah State Bulletin, July 15, 2006, Vol. 2006, No. 14 at 49 (Ex. 34 to Comment Letter).

[95] The 2007 NOI was comprised of a series of submissions provided "on May 2, 2007, July 19, 2007, September 17, 2007, September 21, 2007, October 26, 2007, November 27, 2007, December 5, 2007 and December 26, 2007." *See* 2008 Approval Order at 3 (Ex. 36 to Comment Letter). However, UDAQ has apparently lost the December 5, 2007 and December 26, 2007 supplements, as it was unable to produce them to Sierra Club in response to a GRAMA request. The 2007 NOI, attached as Ex. 37 to the Comment Letter, is the most recent and complete version of the pertinent NOI.

[96] The 2007 NOI sought approval for the installation of low NOx burners/overfire air at Hunter Units 1, 2 and 3, upgrades to the scrubbers to achieve 90% control via elimination of bypass at Hunter Units 1 2 and 3, and the replacement of electrostatic precipitators (ESPs) with baghouses at Hunter Units 1 and 2. (Ex.37 to Comment Letter at 2-1).

[97] *See* 2007 NOI at 1-1, pdf 4, 2-2, pdf 6 (Ex. 37 to Comment Letter).

asserted that the proposed pollution controls would be completed "between 2007 and May 2010."[99] On March 13, 2008, UDAQ issued a corresponding Approval Order.[100]

On December 18, 2009, PacifiCorp informed UDAQ that the Unit 1 pollution control projects were being deferred until 2014.[101] However, the company asserted that it was going forward with the other "contemporaneous capital projects" at Unit 1 authorized by the 2008 Approval Order.[102] PacifiCorp also stated that it would perform a series of additional Unit "capital and operations and maintenance projects" in 2010-11 which were not covered by the 2007 NOI or the 2008 Approval Order, including the replacement of Unit 1's economizer, low temperature superheater, finishing superheater, and pulverizer components, as well as high pressure/intermediate pressure/low pressure turbine upgrades.[103] This latter set of unpermitted projects was performed at Hunter Unit 1 between approximately February 27, 2010 and April 13, 2010 along with other work.[104]

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[98] *See* Comment Letter at 55-56 and Table 13 (Ex. B); 2007 NOI at Appendix A, 26, pdf 31 (Ex. 37 to Comment Letter).
[99] 2007 NOI at 2-1, pdf 6 (Ex. 37 to Comment Letter).
[100] March 13, 2008 Approval Order DAQE-AN0102370012-08 for the Hunter Plant (Ex. 36 to Comment Letter); UDAQ Modified Source Plan Review, January 25, 2008, for 2008 Approval Order at 26 (listing Unit 1 projects) (Ex. 38 to Comment Letter).
[101] Dec. 18, 2009 Letter from William K. Lawson, PacifiCorp, to Ms. Cheryl Heying, UDAQ, at 1, pdf 1 (Ex. 39 to Comment Letter). This correspondence was not publicly noticed.
[102] *Id.*; *see also* UDAQ Modified Source Plan Review, January 25, 2008, for 2008 Approval Order, Section 7.1.7, at 26 (Hunter Unit 1 projects approved in the 2008 Approval Order) (Ex. 38 to Comment Letter). The projects that were approved by UDAQ for Hunter Unit 1 are listed in Table 13 to Comment Letter at 55-56).
[103] *See* Comment Letter at 57-60 and Table 14 (listing projects not approved by 2007 NOI or 2008 Approval Order) (Ex. B); December 18, 2009 Letter from William K. Lawson, PacifiCorp, to Ms. Cheryl Heying, UDAQ, at 2, pdf 2, and Attachment 2 at 1-2, pdf 6-7 (Ex. 39 to Comment Letter).
[104] Nov. 24, 2010 Letter from Jim Doak, PacifiCorp, to Ms. Cheryl Heying, UDAQ at 1, and at Attachment 2, at 2-3 (identifying these new projects, indicating they were not part of the permit application (*i.e.*, the 2007 NOI) associated with the 2008 Approval Order (DAQE-AN0102370012-08), and confirming that these projects were completed in April 2010) (Ex. 42 to Comment Letter). Table 1 of that letter identifies the modifications at Unit 1 exactly as they were described by PacifiCorp to UDAQ and which, individually and/or collectively, resulted in triggering the application of the Approval Order Rule of the EPA-approved Utah SIP. The outage dates associated with this work were determined by reviewing emissions and operational data submitted for each Hunter unit by PacifiCorp to the U.S. Environmental Protection Agency's Air Markets Program Data, *available at* http://ampd.epa.gov/ampd/.

The unpermitted 2010 Unit 1 work, individually or collectively, had the potential to result in increases of emissions of air contaminants, including, but not limited to, SO2, NOx, and PM from Hunter Unit 1. It was reasonable to expect that this work might increase those air contaminants due to an expected increase in the maximum hourly fuel burning capacity of Unit 1, an increase in its operating capacity factor, and/or an increase in the total number of hours in a year that Unit 1 could operate as a consequence of improvements in reliability and/or availability and/or improvements in efficiency, which could lead to an increase in dispatching of the unit.[105] There are no exemptions from the requirement to obtain an Approval Order for routine maintenance,[106] or from the "replacement-in-kind" rule.[107]

UDAQ either erroneously relied on inapplicable and unlawful PALs[108] or it simply ignored its Approval Order rules, which stands in stark contrast to Utah's repeated representations about the operation of the Approval Order rules. For example, UDAQ argued that, regardless of whether the 2002 NSR reform rules would allow grandfathered plants to

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[105] *See* Comment Letter at 65-68 (Ex. B).

[106] PacifiCorp's suggested that many of the 2010 Unit 1 projects somehow satisfied the PSD program's routine maintenance, repair and replacement (RMRR) exemption, *see* Dec. 18, 2009 Letter from William K. Lawson, PacifiCorp, to Ms. Cheryl Heying, UDAQ, at 2, pdf 2 (Ex. 39 to Comment Letter). However, that exemption is not applicable to Approval Order requirements. Comment Letter at 52, 63(Ex. B); *see* UACR R307-1-3.1.7.A through F. Similarly, UDAQ acquiescence in PacifiCorp's contention that the delay in the installation of pollution controls did not violate the PSD program's requirement to "commence construction" in accordance with 40 C.F.R. § 52.21(r)(2) and proposal to provide annual reports of emissions pursuant to the federal PSD rule found at 40 C.F.R. § 52.21(r)(6)(iv) as a "method to demonstrate continued compliance" did not reflect any consideration of whether the Utah's Approval Order rules had been triggered. Feb.1, 2010 Letter from Cheryl Heying, UDAQ, to William K. Lawson, PacifiCorp, at 1-2 (Ex. 40 to Comment Letter). Moreover, even in the PSD context, the 2010 Unit 1 projects at issue could not legitimately be deemed RMRR.

[107] UACR R307-1-3 *et seq.*; *compare* Utah Admin. Code R307-401-11 *et seq.*; 79 Fed. Reg. 7,072, 7,077 (Feb. 6, 2014) (adopting Utah's replacement-in-kind rule at Utah Admin. Code R307-401-11 *et seq.* into the Utah SIP in 2014).

[108] Not only are the PALs unlawful, *see supra,* but Utah Admin. Code R307-401-13 (2010) specifically provided at the time of the 2010 work that "[a] plantwide applicability limit under R307-405-21 does not exempt a stationary source from the requirements of R307-401," which includes the Approval Order requirements. Moreover, PALs are included in the Utah SIP as a component of Utah's PSD regulations and can only be integrated, read as whole and coherently applied within the PSD context, utilizing defined PSD applicability standards. *See, e.g.*, Utah. Admin. Code R307-405-21. PALs are not incorporated the Approval Order rules set forth in Utah Admin. Code R307-401-1 *et seq*. and could not be coherently applied to Approval Order requirements, which adopt a different applicability standard than PSD.

upgrade or conduct life extension projects without triggering major source permitting, Utah's Approval Order Rule would likely require the application of BACT to such projects.[109] EPA relied on Utah's representations in rejecting comments that its approval of Utah's adoption of NSR Reform constituted an unlawful SIP relaxation under Section 110(l) of the Clean Air Act.[110] Instead of responding to Sierra Club's extensive comments on this issue, UDAQ claimed that "[a]ny concerns regarding previous permits should have been raised during [the] public comments" period for the prior permit.[111] UDAQ did not question any of the analyses presented in Comment Letter, nor did UDAQ provide any explanation for the exemption of the 2010 projects at Hunter Unit 1 from the Approval Order requirements of the Utah SIP. As discussed below, EPA must object to the Permit because of UDAQ's failure to respond to these substantive comments, the Permit's failure to identify and include the Approval Order permitting requirements of the Utah SIP, including BACT[112] for SO2, NOx and particulate matter, as applicable requirements for Hunter Unit 1 as a result of the 2010 projects, and the Permit's failure to include a schedule of compliance to ensure that Hunter Unit 1 is brought into compliance with the applicable Approval Order permitting requirements.

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[109] *See* Feb. 24, 2006 Memorandum from UDAQ's C. Delaney and J. Schubach to Utah Air Quality Board, Enclosing NSR Reform Rules Comments and Responses at 2 (Ex. 35 to Comment Letter).

[110] *See* 76 Fed. Reg. 41,712, 41,714-15 (July 15, 2011); *see also* Utah State Bulletin, July 15, 2006, Vol. 2006, No. 14 at 42-43 (Ex. 34 to Comment Letter).

[111] *See* RTC at 2-3 (Ex. D).

[112] Sierra Club provided extensive comments on what pollution controls would likely constitute BACT for the Hunter Units in its Comment Letter at 79-95 (Ex. B). Sierra Club demonstrated that the currently pollution controls and/or emission limits of the Title V permit would not constitute BACT for the Hunter Units 1, 2 or 3. Although the Title V permit identifies the authority for the SO2, NOx, and PM limits, including the SO2 and NOx PALs as "R307-401-8(1)(a) [BACT]," the permit records for the Hunter Plant do not indicate that any recent evaluation of BACT was conducted for the Hunter units for any pollutant except CO in 2008. *See* November 27, 2007 NOI, Sections 5.0 and 6.0, at 5.1-6.3, pdf 21-27 (NOI only contains a BACT analysis for one pollutant, carbon monoxide) (Ex. 37 to Comment Letter)*; see also* UDAQ Modified Source Plan Review, January 25, 2008, for 2008 Approval Order, Sections 1.3 and 6.0, at 8, 20-24 (confirming that no BACT review was conducted for SO2, NOx, or PM or any other pollutants other than CO) (Ex. 38 to Comment Letter).

D. The Administrator Must Object to the Hunter Title V Permit Because It Fails to Include PSD Requirements for NOx including BACT for the 2010 Projects at Hunter Unit 1.

Assuming that the NOx PAL was not validly established, the 2010 projects at Hunter Unit 1 discussed in Section C above, including the replacement of Unit 1's economizer, low temperature superheater, finishing superheater, and pulverizer components, as well as high pressure/intermediate pressure/low pressure turbine upgrades,[113] should have triggered PSD for NOx emissions.

The applicable PSD provisions of the Utah SIP at the time of the 2010 projects were based on EPA's July 21, 1992 PSD rules commonly referred to as the "WEPCO Rule," under which PSD applicability was determined based on a comparison of actual emissions before the project(s) to representative actual annual emissions after the project.[114] Although PacifiCorp claimed without providing any further information that "many" of the 2010 projects at Unit1 were considered RMRR,[115] the high pressure/intermediate pressure/low pressure turbine upgrades at Unit 1 which PacifiCorp conceded were not "like kind"[116] would not be considered RMRR.[117] And neither would the other large boiler component replacements performed as part of the 2010 projects.[118]

PacifiCorp's 2007 NOI reflects a 50 MMBtu/hour heat input increase, which was likely related to the HP/IP/LP turbine upgrades and possibly also the boiler component replacement

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[113] *See* Comment Letter at 57-60 and Table 14 (Ex. B) (listing projects not approved by 2007 NOI or 2008 Approval Order); December 18, 2009 Letter from William K. Lawson, PacifiCorp, to Ms. Cheryl Heying, UDAQ, at 2, pdf 2, and Attach.2 at 1-2, pdf 6-7 (Ex. 39 to Comment Letter).

[114] 57 Fed. Reg. 32,314 (July 21, 1992) (EPA WEPCO rule). 69 Fed. Reg. 51,368, 51,369-70 (Aug. 19, 2004) (EPA approval of Utah's adoption of the PSD rule revisions of the WEPCO Rule); 40 C.F.R. § 52.2320(c)(58)(i); *see* definitions of "actual emissions" and "representative actual annual emissions" in R307-101-2, State-effective date of July 12, 2001, of the EPA-approved Utah SIP effective September 20, 2004. 69 Fed. Reg. 51,368 (Aug. 19, 2004).

[115] December 18, 2009 Letter from William K. Lawson, PacifiCorp, to Ms. Cheryl Heying, UDAQ, at 2, pdf 2 (Ex. 39 to Comment Letter).

[116] *Id.*

[117] *See* Comment Letter, Section I.C.2.a, at 18-20 (Ex. B) and Ex. 6, 8, 10, 11, 12 and 13 to Comment Letter.

[118] *Id.*

projects completed at Hunter Unit 1 in 2010.[119] In its comments to UDAQ, Sierra Club's analysis demonstrated that the 50 MMBtu/hour heat input increase at Hunter Unit 1 should have been projected to result in a significant emissions increase of NOx.[120] Further, because the pollution control upgrades had been delayed at Unit 1 until 2014[121] and because the NOx pollution controls at Hunter Units 2 and 3 were previously relied on in UDAQ's issuance of the 2008 Approval Order and thus the reductions were not creditable for netting,[122] Sierra Club's analysis demonstrates that a significant net emissions increase of NOx should have been expected for the 2010 projects at Hunter Unit 1.[123]

Again, UDAQ unlawfully provided no response to these comments, stating that "[a]ny concerns regarding previous permits should have been raised during [the] public comments" period for the prior permit.[124] UDAQ also did not respond to Sierra Club's comments that the 2008 PALs were unlawfully established because EPA did not approve Utah's PAL provisions as part of the Utah SIP until 2011.[125] Because the PALs were not lawfully established, the PALs should not have been relied upon to exempt the 2010 projects at Hunter Unit 1 from PSD permitting requirements. Moreover, as EPA informed UDAQ in comments, PacifiCorp could not rely on the 10-year PAL provisions to avoid PSD for a future project, and UDAQ could not implement 10-year PALs until EPA approved those provisions as part of the SIP.

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[119] *See* 2007 NOI at 2 (Ex. 46 to Comment Letter). *See also* 1997 NOI, Attach, Table entitled "Hunter Plant and Coal Prep Annual Emissions Inventory, Production Data Input Sheet for Calendar Year: Future Potential Emissions." (Ex. 1 to Comment Letter).

[120] *See* Comment Letter at 72-73 (Ex. B). Specifically, Sierra Club assumed Hunter Unit 1 would operate at 50 MMBtu/hour higher heat input at 85% capacity factor, which is a reasonable expectation for a base loaded unit such as Hunter Unit 1. *See* Ex. 52-54 to Comment Letter (providing support for Hunter Unit 1 being considered a base load unit). For a projection of NOx emissions, Sierra Club based emissions on the annual average NOx emission rate achieved at Hunter Unit 1 based on Air Markets Program Data for the 2-years before the 2010 projects, which was 0.36 lb/MMBtu (Ex. 54 to Comment Letter).

[121] *See* Dec. 18, 2009 PacifiCorp Letter to UDAQ at 1 (Ex. 39 to Comment Letter).

[122] Definition of "net emissions increase," subsection 2.E(4), in UACR R R307-1-1 (1995).

[123] *See* Comment Letter at 73 (Ex. B). 50 MMBtu/hour x 8760 hours/yr x 0.85 (cap factor) x 0.36 lb/MMBtu x 1 ton/2000 lb = 67 tons per year projected NOx emissions increase.

[124] *See* RTC at 2-3 (Ex. D).

[125] *Id.*

For all of these reasons, EPA must object because the permit fails to include PSD permitting requirements of the Utah SIP including best available control technology (BACT)[126] for NOx for the 2010 projects at Hunter Unit 1 and because it fails to include a schedule of compliance to ensure that the Approval Order permitting requirements are ultimately incorporated into the Hunter Title V permit.

E. The Administrator Must Object to the Hunter Title V Renewal Permit Because UDAQ has Failed to Consider and Respond to Sierra Club's Comments

Instead of considering and responding to the significant issues raised in Sierra Club's comments,[127] UDAQ rejected those comments out of hand, claiming that they were "not applicable to this Title V renewal action" and only "pertain to the underlying requirements that are now simply incorporated into the Title V operating permit."[128] Based on this erroneous position on the scope of this Title V renewal action, UDAQ chose not to substantively respond to Sierra Club's comments as required by law.[129] UDAQ vaguely asserted that some issues raised by Sierra Club related to compliance, stating that compliance was solely "an enforcement matter for UDAQ" and beyond the scope of this Title V permit renewal action.[130] UDAQ also claimed that other issues relating to prior New Source Review permitting actions and PALs,[131] as well as

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[126] *See supra* at n. 114.

[127] Sierra Club commented on all the other issues addressed in this Petition, including the late 1990s major modifications at the Hunter Plant, the 2010 modifications at Hunter Unit 1, the PAL issues, and the issues relating to failure to assure compliance with Utah SIP's requirement prohibiting air pollution at levels which exceed the 1-hr. SO2 NAAQS. This final objection is appropriate to raise in this Petition because the grounds for it arose after the close of the public comment period when UDAQ refused to substantively respond to over 100 pages of Sierra Club's comments. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

[128] RTC at 3 (Ex. D)

[129] *See* Utah Admin. Code R307-415-7i.

[130] RTC at 2 (Ex. D).

[131] In RTC at 4-6 (Ex. D), UDAQ dismissed several sections of Sierra Club's comments related to PAL issues, without substantively responding to the issues raised. UDAQ indicated that Sierra Club's comments in Section VII of its Comment Letter relating to PAL issues "pertain[ed] to New Source Review" and cryptically argued that because the "renewal Title V permit for PacificCorp Energy's Hunter plant is based on the April 6, 2015 Approval Order and applicable State and Federal Rules," Sierra Club's "comments [we]re not applicable to the Title V

issues relating to the Utah SIP, were beyond the scope of this Title V action and could only have been raised in comments submitted at the time of those permitting and SIP determinations were being made.[132] UDAQ's fundamental position that it need not consider whether the Hunter's Title V renewal permit assures compliance with all applicable requirements is wrong as a matter of law. UDAQ had an obligation to consider and substantively respond to Sierra Club's comments and, because it failed to do so, the Administrator must object to the Hunter Title V renewal permit.

The Administrator objected to Kentucky's TVA Paradise Title V renewal permit for the same types of shortcomings that were committed here; namely, the state permitting agency's failure to respond to public comments that a plant made modifications in the past that should have triggered PSD review requirements. Like the situation at hand, petitioners claimed that PSD should be an applicable requirement of the Title V permit based on past modifications that had avoided PSD review[133] but the state agency did not consider the petitioners' comments. In its objection, the EPA recognized, "[i]t is a general principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments."[134] EPA concluded that Kentucky's response to

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renewal permitting action." *Id.* at 4. Similarly, UDAQ dismissed Sierra Club's additional comments relating to PALs at Section IX of the Comment Letter and failed to provide any substantive response. *Id.* at 5-6. UDAQ characterized the issues raised by Sierra Club as pertaining to New Source Review and Approval Order permitting and a Title V administrative amendment in 2008 and vacuously maintained that since "the purpose of this permitting action is to renew the Hunter Title V operating permit as proposed," the question of [w]hether UDAQ properly followed permitting procedures in previous permitting actions is not at issue in this proceeding . . ." *Id.* at 5-6. Based on that muddled reasoning, UDAQ concluded that Sierra Club's comments were "are not applicable to this Title V renewal action." *Id.* at 6.

[132] The 2010 Approval Order issues involving Unit 1 are analogous.

[133] *Id.*

[134] *TVA Paradise* Objection at 5 (citing *Home Box Office v. FCC*, 567 F.2d 9, 35 (D.C. Cir. 1977) ("the opportunity to comment is meaningless unless the agency responds to significant points raised by the public."); *In re Cemex, Inc, Lyons Cement Plant*, Petition No. VIII-2008-01, Order Responding to Petitioner's Request that Administrator Object to Issuance of State Operating Permit at 10 (Apr. 20, 2009), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/cemex_response2009.pdf; *In re Alliant Energy WPL, Edgewater Generating Station*, Petition No. V -2009-02, Order Responding to Petitioner's Request That the

the petitioner's comments "does not address the substance of the comment" and the state's failure to respond to the significant comment "may have resulted in one or more deficiencies" in the permit.[135] EPA therefore ordered Kentucky to consider the information provided by the petitioner in support of its comments and, if appropriate, "to revise the permit to include a compliance schedule for addressing those requirements."[136] EPA must order UDAQ to do the same here.

UDAQ's failure to meet its obligation to respond to Sierra Club's substantive comments appears to be premised on a misunderstanding of the differences between a Title V renewal permit action and a Title V significant modification. "EPA interprets its Title V regulations at 40 C.F.R. part 70 to require different opportunities for citizens to petition on initial permit issuance, permit modifications, and permit renewals."[137] The scope of public comment on Title V significant modification permits is typically limited "to issues directly related to [the] modifications" in question.[138] But when a Title V renewal permit is proposed, which should occur roughly every five years,[139] the Title V process "provides the public with an opportunity to review, comment on, and object ***to all aspects of the permit***."[140] This broad scope of review necessarily invites comments challenging the erroneous omission of applicable requirements

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Administrator Object to Issuance of State Operating Permit, at 8 (Aug. 17, 2010) ("*Edgewater* Order"), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/edgewater_response2009.pdf.

[135] *Id.*

[136] *Id.*

[137] *In the Matter of Wisconsin Public Service Corporation - Weston Generating Station*, Permit No. 73700902 & P02, Petition No. V-2006-4, Order Responding to Petitioner's Request that the Administrator Object to the Issuance of State Operating Permit at 5 (Dec. 19, 2007), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/wisconsic_public_service_weston_response2006.pdf.

[138] *Id.* at 5-6.

[139] One of the shameful aspects of this situation is that UDAQ sat on the application for the Hunter Title V renewal permit for thirteen (13) years after the mandatory deadline for final action by the agency had passed and only acted on the permit in response to Sierra Club's mandamus lawsuit. Because of UDAQ's delay, the public has been denied the opportunity to comment on the full scope of the Hunter Title V permit for around eighteen (18) years. Even now, in the context of this much belated Title V renewal permit, UDAQ is seeking to restrict the public's right to address the full scope of the Hunter Title V permit in contravention of the applicable law and regulations and without due regard to the significant public health threat posed by the Hunter Plant's continuing emissions.

[140] *Id.* at 6 (citing 40 C.F.R § 70.7(c) (emphasis added).

from Title V renewal permits, and comfortably encompasses all the issues raised in Sierra Club's comments and this Petition.[141]

Contrary to UDAQ's suggestions, the requirements implicated by Sierra Club's comments and addressed by this Petition are not "new" requirements. They are requirements that have been triggered in the past and remain presently applicable despite UDAQ's failure to incorporate them into the Hunter Title V permit.

Additionally, no potential jurisdictional bar exists[142] to Sierra Club pursuing the issues raised in its comments and this Petition relating to historic modifications that triggered PSD or Approval Order requirements, prior state permitting decisions and omissions,[143] or any other applicable requirements of the Utah SIP through the Title V administrative process. Neither the original Title V permit, any subsequent revisions or modifications, the current Title V permit, nor any other Approval Orders imposed an effective permit shield[144] otherwise prohibited Sierra

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[141] UDAQ's repeated contention that the Hunter Plant's permit is "based on the April 6, 2015 Approval Order and applicable State and Federal Rules" does not change the permit's fundamental nature. RTC at 3. It remains a Title V renewal permit subject to a full review.

[142] *See generally Sierra Club v. Otter Tail Power Co.*, 615 F.3d 1008, 1019-1023 (8th Cir. 2010) (addressing effect of Clean Air Act's jurisdictional bar set forth at 42 U.S.C. § 7607(b)(2) on federal citizen suit enforcement actions).

[143] Sierra Club's comments on unlawful PALs imposed in 2008 relate to PSD requirements that are ongoing and applicable to the Hunter Plant today and in the future. Those provisions will govern, among other things, how PSD applicability determinations will be made for the life of the PALs. Accordingly, these PAL provisions fall within the scope of review of the Hunter Title V permit renewal as applicable requirements, just as other New Source Review, PSD and Approval requirements triggered in the past, such as the obligation to obtain an appropriate permit and apply BACT, remain applicable requirements and subject to review in the Title V renewal permit context. *See, e.g.*, *TVA Paradise* Objection at 1-2, 5, 14; *NYPIRG*, 427 F.3d at 177-83; *Columbia Station* Order at 8-10; *Monroe* Order at 2, 6-24; May 20, 1999 Letter from John S. Seitz, Director of Office of Air Quality Planning and Standards, to Mr. Robert Hodanbosi and Mr. Charles Lagges, STAPPA/ALAPCO, Enclosure A at 2-3 (Ex. 85 to Comment Letter). UDAQ's effort to restrict the scope of review for a Title V renewal permit by suggesting that the Hunter Title V renewal permit is only "based on the April 6, 2015 Approval Order and applicable State and Federal Rules" or by blanketing stating that questions relating to "whether UDAQ properly followed permitting procedures in previous permitting actions" is beyond the scope of this permitting action are unavailing. 40 C.F.R § 70.7(c); Utah Admin. Code r. 307-415-7c(1).

[144] 42 U.S.C. § 7661c(f); 40 C.F.R. § 70.6(f); Utah Admin. Code r. 307-415-6f; *United States v. East Ky. Power Coop., Inc.*, 498 F. Supp. 2d 1010, 1016-18 (E.D. Ky. 2007) (recognizing that Title V's permit shield is only effective to bar court enforcement except where the applicable requirements in question are expressly set forth in the underlying permit and rejecting collateral attack arguments in enforcement case and contention that the "only remedy available" for a deficient Title V permit that the fails to include applicable PSD limitations is to reopen the Title V permit and revise it under 40 C.F.R. § 70.7(f)(1)(iii)) (citing *Pennsylvania v. Allegheny Energy, Inc.*, 2006 U.S. Dist. LEXIS 38377, at *23-27 (W.D. Pa. Apr. 19, 2006)).

Club from pursuing such issues here.[145] On the contrary, Title V renewal actions are designed to serve as mechanisms for incorporating erroneously omitted applicable requirements into Title V permits.

Finally, UDAQ's contention that Sierra Club's comments and the issues addressed by this Petition are beyond the scope of review in a Title V permit renewal because they implicate compliance and enforcement matters is meritless. Many core issues in the Title V process can be viewed as broadly relating to compliance and enforcement matters.[146] However, nothing in the Clean Air Act or Title V regulations suggests that such issues are excluded from review in the Title V process, as doing so would eviscerate the Title V, which, in part, is designed to assure compliance with applicable requirements that are currently being violated.

For all the forgoing reasons, the Administrator must object to the Hunter Title V Permit because of UDAQ's failure to respond to Sierra Club's substantive comments associated with the issues raised in this Petition.

VI. CONCLUSION

For all the foregoing reasons, the Hunter Permit fails to meet the requirements of the Clean Air Act, the Utah SIP, and related regulations. These deficiencies require that the

[145] *TVA Paradise* Objection at 1-2, 5, 14 (addressing alleged PSD modifications performed between 1984-86 in petition filed on 2010); *NYPIRG,* 427 F.3d at 177, 179-183 (granting Title V petition challenge filed in 2002 to address alleged PSD modifications made in 1983-85); *Columbia Station* Order at 8-10; *Edgewater* Order at 3-6; *Monroe* Order at 2, 6-24 (granting Title V petition based PSD issues); *Crystal River* Objection (Ex. G); *see also* May 20, 1999 Letter from John S. Seitz, Director of Office of Air Quality Planning and Standards, to Mr. Robert Hodanbosi and Mr. Charles Lagges, STAPPA/ALAPCO, Enclosure A at 2-3 (noting that the EPA "may object to or reopen a title V permit in response to a public petition showing that title I preconstruction permitting requirements have not been met" and, "where EPA believes that an emission unit has not gone through the proper preconstruction permitting process (and therefore one or more applicable requirements are not incorporated in the draft or proposed title V permit), EPA may object to the title V permit.") (Ex. 85 to Comment Letter).

[146] For example, central Title V questions involve determinations of whether permits adequately assure compliance with applicable requirements, 40 C.F.R. § 70.1(b); 42 U.S.C. § 7661c; Utah Admin. Code R307-415-6a(1), and include adequate schedules of compliance where sources are not complying with applicable requirements at the time of permitting. 40 C.F.R. § 70.5(c)(8)(iii)(C) and 70.6(c)(3); Utah Admin. Code R307-415-1; 307-415-5c(3)(c), (4), (5) and (8); 307-415-6a(1); and 307-415-6c(1), (3), (4) and (5).

Administrator object to the Permit pursuant to 40 C.F.R. § 70.8(c)(1). EPA has objected to Title V permits for failure to properly include applicable PSD requirements for major modifications many times in similar circumstances.[147] For example, EPA objected to the Columbia Title V permit because Wisconsin excluded a major modification from PSD requirements by applying a faulty analysis that ignored projected post-project emissions.[148] EPA ordered the state to:

> do a proper applicability determination based on the correct post-project emissions standard, and clearly explain its analysis in the permit record. If WDNR concludes that the physical change, in fact, resulted in a significant net emissions increase for SO2, WDNR must require WPL to obtain a PSD permit for the modification and will have to make appropriate changes to the source's title V permit and the permit record.[149]

In another example, EPA objected to the Crystal River Title V permit because Florida unlawfully granted the facility an exemption from PSD requirements for a proposed major modification to burn petroleum coke.[150]

As detailed in this Petition, the Hunter Title V permit does not include applicable PSD and Approval Order requirements, nor does it ensure compliance with the air quality standards, and it does not include a compliance schedule for these requirements. Thus, Utah's failures

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[147] *Columbia Station* Order at 7-10; *Edgewater* Order 3-6; *Monroe* Order at 2, 6-24 (granting Title V petition based PSD issues); *Crystal River* Objection (Ex. G); *see also In the Matter of Consolidated Environmental Management, Inc. – Nucor Steel, Louisiana, Pig Iron and DRI Manufacturing in St. James Parish, Louisiana*, Permit Nos. 3086-VO and 2560-00281-V1, Partial Order Responding to Petitioner's May 3, 2011 and October 3, 2012 Requests that the Administrator Object to the Issuance of Title V Operating Permits Issued by the Louisiana Department of Environmental Quality, at 8 (EPA Adm'r. June 19, 2013) ("EPA has previously stated its view that if a PSD permit that is incorporated into a title V permit does not meet the requirements of the SIP, the title V permit will not be in compliance with all applicable requirements."), *available at* https://www.epa.gov/sites/production/files/2015-08/documents/nucor_steel_partialresponse2011.pdf (citing *Edwardsport* Order at 3).

[148] *Columbia Station* Order at 8.

[149] *Id.* at 10; *see also* May 20, 1999 Letter from John S. Seitz, Director of Office of Air Quality Planning and Standards, to Mr. Robert Hodanbosi and Mr. Charles Lagges, STAPPA/ALAPCO, Enclosure A at 2-3 (noting that the EPA "may object to or reopen a title V permit in response to a public petition showing that title I preconstruction permitting requirements have not been met" and, "where EPA believes that an emission unit has not gone through the proper preconstruction permitting process (and therefore one or more applicable requirements are not incorporated in the draft or proposed title V permit), EPA may object to the title V permit."). (Ex. 85 to Comment Letter); *NYPIRG*, 427 F.3d at 183.

[150] *Crystal River* Objection at 9 (Ex. G).

require EPA to object to the Hunter Title V permit. To comply with the requirements of Title V and address these serious, longstanding and continuing violations, EPA must order that:

1. the Hunter Title V Permit contain a compliance schedule for obtaining a PSD permit for unpermitted major modifications in the late 1990s and 2010;

2. the Hunter Title V Permit contain a compliance schedule for obtaining an Approval Order, including a PSD permit, for the 2010 modifications at Hunter Unit 1;

3. UDAQ remove unlawful PAL provisions;

4. UDAQ fully consider and address the issues raised in Sierra Club's Comments.

Respectfully submitted on behalf of Sierra Club,

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PRECEDENTIAL

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

No. 14-3147

NATIONAL PARKS CONSERVATION ASSOCIATION;
SIERRA CLUB; CLEAN AIR COUNCIL,
Petitioners

v.

UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY,
Respondent

* Pennsylvania Department of Environmental Protection;
Homer City Generation LP,
Intervenors

*(Pursuant to Clerk Order dated 08/21/14)

On Petition for Review of Final Agency Action
of the United States Environmental Protection Agency
(EPA-R03-OAR-2012-0002)

Argued April 14, 2015

Before: AMBRO, VANASKIE, and SHWARTZ,
Circuit Judges

(Opinion Filed: September 29, 2015)

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OPINION OF THE COURT

VANASKIE, *Circuit Judge.*

Section 169A of the Clean Air Act, 42 U.S.C. § 7491, and implementing regulations promulgated by the United States Environmental Protection Agency ("EPA") require states to evaluate the impact that emissions from certain sources of pollution within their borders have on atmospheric visibility in national parks and wilderness areas. After conducting this evaluation, the Commonwealth of Pennsylvania declined to require its sources to implement additional pollution controls because it concluded that the

costs associated with the controls outweighed the limited visibility improvements they would produce. The Commonwealth's conclusions were set forth in its 2010 State Implementation Plan ("SIP"), which was approved by the EPA in 2014.

Alleging that the EPA's approval of Pennsylvania's SIP was arbitrary and capricious, the National Parks Conservation Association, Sierra Club, and Clean Air Council (collectively, "Conservation Groups") filed the petition for review presently before the Court. For the reasons that follow, we will grant the petition in part and deny it in part, and remand the matter to the EPA for further consideration.

I.

A. Statutory and Regulatory Framework

In 1970, Congress enacted the Clean Air Act, 42 U.S.C. §§ 7401–7671q, to address the increasing amount of air pollution created by the industrialization of the United States and the resulting threat to public health and welfare. Employing "cooperative federalism," the Clean Air Act gives both the federal government and the states responsibility for maintaining and improving air quality: "the federal government develops baseline standards that the states individually implement and enforce." *Bell v. Cheswick Generating Station*, 734 F.3d 188, 190 (3d Cir. 2013) (citation and quotation marks omitted).

As originally enacted, the Clean Air Act "did not elaborate on the protection of *visibility* as an air-quality related value." *Chevron U.S.A., Inc. v. EPA*, 658 F.2d 271, 272 (5th Cir. 1981) (emphasis added). In 1977, however,

Congress added § 169A to the Clean Air Act "[i]n response to a growing awareness that visibility was rapid ly deteriorating in many places, such as wilderness areas and national parks . . . ." *Id.* With § 169A , Congress "established as a national goal the 'prevention of any future, and the remedying of any existing, impairment in visibility in mandatory class I areas which impairment results from man -made air pollution.'" *Am. Corn Growers Ass'n v. EPA* , 291 F.3d 1, 3 (D.C. Cir. 2002) (per curiam) (quoting 42 U.S.C. § 7491(a)(1)). The protected "Class I areas" include certain national parks and wilderness areas under 42 U.S.C. § 7472(a).[1] "Visibility impairment" means both "reduction in visual range and atmospheric discoloration." *Id.* § 7491(g)(6).

In connection with § 169A, Congress directed the EPA to issue regulations to ensure "reasonable progress" toward the national goal of re storing visibility conditions to their natural state in Class I areas. *Id.* § 7491(a)(4). Congress dictated that the EPA's regulations require adoption of a State Implementation Plan ("SIP") by each state that has a Class I area within its borders or whos e emissions "may reasonably be anticipated to cause or contribute to any impairment of visibility" in a ny Class I area. *Id.* § 7491(b)(2). Each SIP must include, *inter alia* , emission limits, compliance

[1] There are 156 Class I areas in the United States, including 47 national parks, 108 wilderness areas, and one international park. No Class I area is located within Pennsylvania's borders. 40 C.F.R. pt. 51, app. Y.; EPA, *List of 156 Mandatory Class I Federal Areas* , http://www.epa.gov/visibility/class1.html (last visited Aug. 26, 2015).

schedules, and a long-term strategy for meeting the national visibility goal. *Id.* In response to this statutory directive, the EPA promulgated the Regional Haze Rule in 1999. *Regional Haze Regulations*, 64 Fed. Reg. 35,714 (July 1, 1999).[2]

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[2] The EPA has explained the visibility impairment known as "regional haze" as follows:

> Regional haze is visibility impairment that is produced by a multitude of sources and activities which are located across a broad geographic area and emit fine particles ($PM_{2.5}$) (*e.g.*, sulfates, nitrates, organic carbon, elemental carbon, and soil dust) and their precursors (*e.g.*, sulfur dioxide (SO_2), nitrogen oxides (NO_X), and in some cases, ammonia (NH_3) and volatile organic compounds (VOC)). Fine particle precursors react in the atmosphere to form fine particulate matter, which impairs visibility by scattering and absorbing light. Visibility impairment reduces the clarity, color, and visible distance that one can see. $PM_{2.5}$ can also cause serious health effects and mortality in humans and contributes to environmental

Section 169A and the Regional Haze Rule also require each SIP to include a determination of the best available retrofit technology ("BART") for certain major stationary sources of pollution that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. *North Dakota v. EPA*, 730 F.3d 750, 756 (8th Cir. 2013) (citing 42 U.S.C. § 7491(b)(2)(A); 40 C.F.R. §§ 51.301, 51.308(e)). BART is defined as "an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility." 40 C.F.R. § 51.301.

To satisfy the BART requirements, a state's SIP must first identify all "BART-eligible" sources within its borders. Under the regulations, a stationary source of air pollution is BART-eligible if it: (1) was in existence on August 7, 1977, but not in operation prior to August 7, 1962; (2) fits within one of 26 identified categories; and (3) has the potential to emit annually at least 250 tons of any air pollutant. *Id.*

Next, a state's SIP must determine which of these BART-eligible sources are "subject to BART." A source is subject to BART if it "emits any air pollutant which may

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> effects such as acid deposition and eutrophication.

Approval and Promulgation of Air Quality Implementation Plans; Commonwealth of Pennsylvania; Regional Haze State Implementation Plan, 77 Fed. Reg. 3,984, 3,985 (Jan. 26, 2012).

reasonably be anticipated to *cause* or *contribute* to any impairment of visibili ty in any mandatory Class I Federal area." *Id.* § 51.308 (e)(1)(ii) (emphasis added) . The EPA recommends that a state consider a source to "cause" visibility impairment if it is responsible for a change in visibility in a Class I area of at least 1.0 deciv iew.[3] *Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations* , 70 Fed. Reg. 39 ,104, 39,118 (July 6, 2005). The suggested threshold for determining whether a source "contributes" to visibility impairment at a level no higher than 0.5 deciviews. *Id.*

For each BART-eligible source that is subject to BART, the state must conduct a source-specific analysis to determine appropriate emission limitations . In so doing, states "weigh[] the following five factors: (1) 'the costs of compliance'; (2) 'the energy and non[-]air quality environmental impacts of compliance '; (3) 'any existing pollution control technology in use at the source '; (4) 'the remaining useful life of the source '; and (5) 'the degree of improvement i n visibility which may reasonably be anticipated to result from the use of such technology. '"

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[3] Changes in visibility are expressed in a standard unit of measurement known as the deciview. *See* 40 C.F.R. § 51.301 (stating that the deciview is "a measurement of visibility impairment" that is "derived from calculated light extinction, such that uniform chang es in haziness correspond to uniform incremental changes in perception across the entire range of conditions, from pristine to highly impaired"). A higher deciview value corresponds with a greater level of visibility impairment.

WildEarth Guardians v. EPA , 759 F.3d 1064, 1068 (9th Cir. 2014) (quoting 42 U.S.C. § 7491(g)(2); 40 C.F.R. pt. 51, app. Y).

To aid states in identifying BART-eligible sources and determining appropriate emission limitations, the EPA issued the BART Guidelines, 70 Fed. Reg. 39,156. *WildEarth Guardians*, 759 F.3d at 1068. The Guidelines, issued in 2005, provide states with a five-step process for making their source-specific BART determinations, and these five steps subsume the statutory considerations listed above. *Id.* at 1068–69 (citing 70 Fed. Reg. 39,127). Under the Guidelines, a state is to first identify all available retrofit control technologies. Second, technically infeasible options are eliminated. Third, the effectiveness of the remaining control techniques is assessed. Fourth, the impacts, including the cost of compliance, energy impacts, non-air quality impacts, and the remaining useful life of the facility, are evaluated. Finally, a state must estimate the visibility impacts at Class I areas. *Id.* at 1069 (citing 70 Fed. Reg. 39,164, 39,166). While states are required to use the Guidelines when making BART determinations for any fossil fuel-fired power plant with a total electricity generating capacity of 750 megawatts or more, the Guidelines are advisory for smaller BART-eligible sources. *Id.* (citing 42 U.S.C. § 7491(b)(2)(B); 40 C.F.R. § 51.308(e)(1)(ii)(B)).

As an alternative to conducting this source-specific analysis, states may instead implement another program if they can demonstrate it is "better-than-BART" at reducing emissions. Specifically, the regional haze regulations permit a state to "opt to implement or require participation in an emissions trading program or other alternative measure" if it can show that the program would result in "greater reasonable

progress" toward the national goal of restoring natural visibility "than would be achieved through the installation and operation of BART." 40 C.F.R. § 51.308(e)(2). States participating in such programs do not have to conduct a source-specific BART analysis or compel pollution sources within their borders to install, operate, and maintain BART at their facilities. *Id.*

Regardless of whether a state conducts the source-specific BART analysis or follows the better-than-BART approach, it must ultimately submit its SIP to the EPA. The EPA, in turn, must review the SIP and determine whether it meets the requirements of the Clean Air Act. 42 U.S.C. § 7410(a)(1). The EPA is required to approve a SIP as a whole if it meets all the statutory requirements, and it may approve any portion of a SIP that meets the requirements. *Id.* at § 7410(k)(3). If a state fails to submit a SIP, submits an incomplete SIP, or submits a SIP that does not meet the statutory requirements, the EPA must enact its own Federal Implementation Plan ("FIP"), unless the state can provide a SIP that the EPA can approve within two years. *North Dakota*, 730 F.3d at 757 (citing 42 U.S.C. § 7410(c)).

B. Procedural Background

Pennsylvania submitted its regional haze SIP to the EPA in December 2010, identifying 34 BART-eligible sources of pollution within its borders. App. 43–171. These pollution sources—various power plants, mills, refineries, and other facilities around the state—emit visibility-impairing particulate matter ("PM") into the atmosphere, as well as the chemical precursors to PM, which include sulfur dioxide ("SO_2") and oxides of nitrogen ("NO_x"). Pennsylvania elected to treat each of these 34 BART-eligible sources as

subject to BART,[4] and it opted to follow the five-step process outlined in the Guidelines for making source-specific BART determinations.[5] Pennsylvania, however, chose to follow the better-than-BART approach with respect to the eight fossil fuel electric generating stations with a capacity of 750 megawatts or more.

Thus, Pennsylvania conducted a source-specific BART analysis regarding the SO_2 and NO_x emissions of each source with an electricity generating capacity below 750 megawatts, but did not do so for the fossil fuel electric generating stations having a capacity of 750 megawatts or more. Pennsylvania noted that these sources participated in the "cap and trade" program[6] for SO_2 and NO_x emissions established by EPA

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[4] This practice ensures that a BART analysis is conducted for every BART-eligible source, even if the deciview impact from the source is not high enough that the source would be considered to "cause" or "contribute" to visibility impairment in any Class I area under 40 C.F.R. § 51.308(e)(1)(ii).

[5] Pennsylvania was obligated to follow the Guidelines for each of the eight fossil fuel-fired power plants in the state that have electricity generating capacity of at least 750 megawatts, but the Guidelines were advisory for the remaining BART-eligible sources. *See* 42 U.S.C. § 7491(b)(2)(B); 40 C.F.R. § 51.308(e)(1)(ii)(B).

[6] A cap and trade program is an environmental policy tool that involves setting a mandatory cap on emissions while providing pollution sources with flexibility as to how they

Clean Air Interstate Rule ("CAIR"), 70 Fed. Reg. 25,162 (May 12, 2005), and concluded that the sources' participation in the cap and trade program was better than BART at reducing such emissions.

Ultimately, Pennsylvania's SIP found that requiring additional emission controls at any of the 34 BART-eligible sources would result in only minimal visibility improvement in affected Class I areas. Weighing this minimal improvement against the cost of implementing the controls, Pennsylvania concluded that additional controls were not warranted.

In January 2012, the EPA issued a proposed rule providing for a limited approval of Pennsylvania's SIP ("2012 Proposed Rule"). *Approval and Promulgation of Air Quality Implementation Plans; Commonwealth of Pennsylvania; Regional Haze State Implementation Plan*, 77 Fed. Reg. 3,984 (Jan. 26, 2012). The EPA concluded that Pennsylvania's BART analysis complied with the statutory requirements of the Clean Air Act and the regional haze regulations. However, the EPA declined to address Pennsylvania's reliance on the better-than-BART CAIR program regarding SO_2 and NO_x emissions for certain pollution sources, noting that particular issue was the subject of a separate rulemaking proceeding. The EPA also announced a one-month period for interested parties to comment on the 2012 Proposed Rule.

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comply with the cap. *See* EPA, *Cap and Trade*, http://www.epa.gov/captrade (last visited Aug. 26, 2015).

On June 7, 2012, the EPA issued its final rule (the "National Rule") in the separate proceeding referenced by the 2012 Proposed Rule, disapproving the SIPs submitted by Pennsylvania and 14 other states to the extent they relied on the CAIR program to limit SO_2 and NO_x emissions. *Regional Haze: Revisions to Provisions Governing Alternatives to Source-Specific Best Available Retrofit Technology (BART) Determinations, Limited SIP Disapprovals, and Federal Implementation Plans*, 77 Fed. Reg. 33,642 (June 7, 2012). With this disapproval, the EPA also promulgated FIPs for 13 of the states (including Pennsylvania), effectively replacing the states' reliance on the CAIR program with reliance on the newly promulgated Cross-State Air Pollution Rule, better known as the Transport Rule. By issuing the National Rule, the EPA also finalized its conclusion that the Transport Rule was better-than-BART at reducing SO_2 and NO_x emissions, and that it addressed the shortcomings of the CAIR program previously identified by the United States Court of Appeals for the District of Columbia Circuit.[7]

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[7] The EPA initially promulgated CAIR in 2005, but the D.C. Circuit vacated the rule in 2008, noting multiple fatal flaws not pertinent to the present case. *North Carolina v. EPA*, 531 F.3d 896, 921 (D.C. Cir. 2008) (per curiam). On rehearing, the D.C. Circuit elected to leave CAIR in place while the EPA crafted a new program to address CAIR's deficiencies. *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008) (per curiam). EPA responded by promulgating the Transfer Rule. The D.C. Circuit vacated this rule in 2012, *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 37 (D.C. Cir. 2012), but the Supreme Court later

Shortly thereafter, on July 13, 2012, the EPA finalized its limited approval of Pennsylvania's SIP. *Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Regional Haze State Implementation Plan*, 77 Fed. Reg. 41,279 (July 13, 2012). With this "2012 Final Rule," the EPA responded to comments regarding the 2012 Proposed Rule and reaffirmed its conclusion that Pennsylvania's BART analysis was proper.

In response to the 2012 Final Rule, the Conservation Groups filed a petition for review with this Court, challenging the rule on a number of fronts. *Nat'l Parks Conservation Assoc. v. EPA*, No. 12-3534. We did not reach the merits of the petition, though, since the EPA filed a motion for voluntary remand without vacatur in order to consider and respond in greater detail to the Conservation Groups' concerns. We granted the motion on October 22, 2013, and remanded the matter to the EPA.

Following remand, the EPA entered a final rule on April 30, 2014 ("2014 Final Rule"), reissuing its limited approval of Pennsylvania's SIP. *Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Regional Haze State Implementation Plan*, 79 Fed. Reg. 24,340 (Apr. 30, 2014). With this rule, the EPA expanded its responses to certain comments and acknowledged numerous deficiencies in Pennsylvania's source-specific BART analysis. In the end, however, the EPA approved the SIP, finding that

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overturned the decision, upheld the Transport Rule, and remanded for further proceedings. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1609–10 (2014).

Pennsylvania reasonably concluded that no additional pollution controls were required at the 34 BART -eligible sources given the low visibility impact of the sources in Class I areas and the high cost of implementing the controls.

This petition for review followed, with the Conservation Groups alleging that the EPA arbitrarily and capriciously approved Pennsylvania's SIP. We subsequently granted motions to intervene filed by the Pennsylvania Department of Environmental Protection (the state agency responsible for drafting Pennsylvania's SIP) and Homer City Generation, L.P., a coal-fired power plant in Indiana County, Pennsylvania.

II.

Under § 307(b)(1) of the Clean Air Act, we have jurisdiction to review a final EPA action that is "locally or regionally applicable" within our Circuit. 42 U.S.C. § 7607(b)(1); *GenOn REMA, LLC v. EPA* , 722 F.3d 513, 519 (3d Cir. 2013). However, a petition for review regarding any "nationally applicable regulations promulgated, or final action taken, by the Administrator [of the EPA] . . . may be filed *only* in the United States Court of Appeals for the District of Columbia." 42 U.S.C. § 7607(b)(1) (emphasis added).

When reviewing a final EPA action, we must "determine whethe r it is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.'" *GenOn REMA* , 722 F.3d at 525 (quoting 42 U.S.C. § 7607(d)(9)(A)). While this is a narrow and deferential standard of review, *Motor Vehicle Mfrs. Ass'n v . State Farm Mut. Auto. Ins. Co.* , 463 U.S. 29, 43 (1983), we must nevertheless ensure that the EPA "examined the relevant data

and articulated a satisfactory explanation for its action, including a rational connection between the facts found and the choice made." *Prometheus Radio Proj ect v. FCC*, 373 F.3d 372, 389 –90 (3d Ci r. 2004) (citation and quotation marks omitted).

III.

A. Transport Rule

The Conservation Groups challenge the EPA's decision to allow Pennsylvania to rely on the Trans port Rule in lieu of condu cting a source -specific BART analysis regarding SO_2 and NO_x emissions from each source with an electricity generating capacity of at least 750 megawatts. In particular, they argue that the Transport Rule is not better -than-BART at reducing SO_2 and NO_x emissions, has not been implemented as the EPA assumed it would be when it permitted Pennsylvania to rely on the rule, and is subject to further delays and legal challenges.

The EPA counters that this appeal is not the appropriate vehicle to challenge its finding that the Transport Rule is better -than-BART or its decision to approve states' reliance on this rule, as both these determinations stem from a final rule and separate rulemaking proceeding not presently before this Court. Moreover, the EPA argues that under 42 U.S.C. § 7607(b)(1), the Conservation Groups must pursue any such challenge in the D.C. Circuit. We agree with the EPA on both points.

Following extensive administrative proceedings, the EPA issued its National Rule on June 7, 2012 . 77 Fed. Reg. 33,642. With it, the EPA finalized the emissions-limiting

Transport Rule, a replacement to the CAIR program that had been invalidated by the D.C. Circuit in *North Carolina v. EPA*, 531 F.3d 896, 921 (D.C. Cir. 2008) (per curiam). The National Rule included the finding that the emission trading programs established by the Transport Rule are better-than-BART. 77 Fed. Reg. 33,643 ("In this action, the EPA is finalizing our finding that the trading programs in the Transport Rule . . . achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source-specific . . . (BART) in those states covered by the Transport Rule."). The EPA also finalized its disapproval of the SIPs submitted by Pennsylvania and 14 other states to the extent they relied on the CAIR program to limit SO_2 and NO_x emissions, and promulgated FIPs for 13 states (including Pennsylvania), effectively replacing the states' reliance on the CAIR program with reliance on the newly promulgated Transfer Rule. *Id.*

By contrast, the 2014 Final Rule, which the Conservation Groups challenge here, does not address the merits of the Transport Rule or Pennsylvania's reliance on it. Instead, it notes those issues were addressed in a "separate but related action," referring to the National Rule. *See* 79 Fed. Reg. 24,340–41. Prior to issuing the 2014 Final Rule, the EPA repeatedly explained that the propriety of the Transport Rule, the CAIR program, and Pennsylvania's reliance on the Transport Rule or the CAIR program were beyond the scope of these rulemaking proceedings. *See, e.g.*, 2012 Final Rule, 77 Fed. Reg. 41,282 ("Comments related to [the Transport Rule] as an alternative to BART for [electricity generating units] are beyond the scope of this rulemaking. The EPA addressed similar comments concerning the Transport Rule as

a BART alternative in [the National Rule]."); 2012 Proposed Rule, 77 Fed. Reg. 3 ,984 ("[W]e are not taking action in this notice to address the Commonwealth's re liance on CAIR to meet certain regional haze requirements.").

In short, the Conservation Groups seek to use this appeal from the administrative proceedings that culminated in the 2014 Final Rule to challenge decisions the EPA reached in separate proceedings. We find no support for this approach in the text of the Clean Air Act provision authorizing judicial review of EPA ac tions. *See* 42 U.S.C. § 7607(b)(1) . Additionally, as the administrative record upon which these decisions were made is not before us, we lack the information necessary to evaluate the EPA's action regarding the Transport Rule. *See Fed. Power Comm'n v. Transcontinental Gas Pipe Line Corp.* , 423 U.S. 326, 331 (1976) (stating that "we have consistently expressed the view that ordinarily review of administrative decisions is to be confined to consideration of the decision of the agency . . . and of the evidence on which it is based") (citation and quotation marks omitted). Accordingly, we cannot entertain the Conservation Groups' challenge to the Transport Rule.

Moreover, even if the Conservation Groups could use this appeal to challenge the Trans port Rule, we are not the proper court to hear the challenge. Under 42 U.S.C. § 7607(b)(1), petitions for review of "nationally applicable regulations promulgated, or final action taken, by the Administrator [of the EPA] . . . may be filed *only* in the [D.C. Circuit]." *Id.* (emphasis added). We conclude that the EPA's National Rule, which finalized the Trans port Rule (applicable to 28 states and th e District of Columbia) and resulted in 13 FIPs permitting various states to rely on the Transport Rule, falls into this category. *See Texas v. EPA* , No. 10 -60961,

2011 WL 710598, at *5 (5th Cir. Feb. 24, 2011) (unpublished) ("Our conclusion today—that an EPA action involving the SIPs of numerous far-flung states is 'nationally applicable' and thus reviewable only in the D.C. Circuit—is consistent with the holdings of our sister circuits to have considered the question."); *W. Va. Chamber of Commerce v. Browner*, No. 98-1013, 1998 WL 827315, at *4 (4th Cir. Dec. 1, 1998) (unpublished) ("An EPA rule need not span 'from sea to shining sea' to be nationally applicable.") (footnote omitted); *Puerto Rican Cement Co. v. EPA*, 889 F.2d 292, 299–300 (1st Cir. 1989) (finding EPA regulations to be "nationally applicable" where they applied to any SIP "that ha[d] been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards," and the list of states governed by the regulations changed as SIPs were approved and disapproved by the EPA).[8]

Accordingly, we will deny the Conservation Groups' petition for review to the extent it challenges the Transport Rule or Pennsylvania's reliance on it.

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[8] What's more, even the Conservation Groups appear to recognize that their challenge to the Transport Rule should be heard by the D.C. Circuit: the National Parks Conservation Association and Sierra Club are participants in consolidated appeals challenging the Transport Rule that are currently pending before the D.C. Circuit. *See Util. Air Regulatory Grp. v. EPA*, No. 12-1342 (D.C. Cir.).

B. Source-Specific BART Analysis

The Conservation Groups also contend that Pennsylvania's source-specific BART analysis failed to comply with the Guidelines in many respects, and that the EPA violated the Clean Air Act by arbitrarily approving Pennsylvania's SIP despite these fatal flaws. The EPA counters that Pennsylvania's analysis was largely proper, and that the errors it committed did not affect the reasonableness of the state's decision not to require its BART-eligible sources to implement additional pollution controls. In what resembles a harmless-error argument, the EPA asserts that, despite Pennsylvania's flawed analysis, the resulting overall picture supported its ultimate decision. As discussed below, while we reject some of the arguments advanced by the Conservation Groups, we are nevertheless compelled to conclude that the EPA arbitrarily approved Pennsylvania's SIP given the multiple flaws in Pennsylvania's BART analysis and the EPA's insufficient explanation as to why it could overlook them.

1. Identification of All Available Retrofit Control Technologies

The Conservation Groups contend that Pennsylvania failed to satisfy the BART requirement of identifying all available pollution control technologies. In particular, they argue that the state did not consider upgrades to existing electrostatic precipitator ("ESP") control technologies for BART-eligible power plants within the state, or other available combinations of controls.

The EPA counters that Pennsylvania's SIP notes that ESP upgrades were considered for all but two power plants,

and that Pennsylvania had declined to consider upgrades at those two facilities because they had recently installed "state-of-the-art" ESP controls. The EPA also argues that Pennsylvania did consider combinations of controls, including fabric filters on sources where technically feasible.

While we agree with the EPA that Pennsylvania's SIP states that upgrades and combinations were considered, we cannot discern from the administrative record the specifics of Pennsylvania's analysis or why it rejected certain upgrades or combinations. As the Conservation Groups not ed in their comments to the 2012 Final Rule, App. 487, Pennsylvania's SIP states in conclusory f ashion that ESP upgrades, enhancements, or replacements were considered for certain sources. *See, e.g.* , App. 221 (stating that "[t]he retrofit technologies reviewed" during the course of the BART analysis for the Mitchell Power Station "included fuel -related modifications, ESP upgrades, enhancements or replacement, replacement of the ESPs with fabric filters or compact hybrid particulate collectors"). What the SIP fails to do, however, is identify or describe the upgrades considered or explain why these controls were rejected. Similarly, the EPA has failed to explain—either in the 2014 Final Rule or now on appeal —how it could meaningfully evaluate Pennsylvania's analysis described in such conclusory fashion. We acknowledge that EPA and BART regulations d o not require exhaustive analysis of ever y conceivable emissions control . *See* 40 C.F.R. pt. 51, app. Y § IV.D. n.12 (explaining th at "[i]t is not necessary to li st all permutations of available control levels that exist for a given technology"). Nonetheless, the EPA has failed to satisfactorily explain why the SIP's conclusory listings are acceptable.

2. Baseline Level for PM Emissions

The Conservation Groups next challenge Pennsylvania's source-specific BART analysis regarding PM emissions from 13 power pl ants. Specifically, they contend the state improperly concluded that the filterable emission limit of 0.1 pound of particulate matter per million British thermal units ("0.1 lb/MMBtu") represents BART for those facilities.[9] The Conservation Groups argue the limit is not sufficiently stringent, and note that lower limits (between 0.07 lb/MMBtu and 0.012 lb/MMBtu) have qualif ied as BART at other facilities . In short, they assert that Pennsylvania had no reasoned basis for selecting the emission limit that it did, and that the EPA arbitrarily approved Pennsylvania's BART analysis regarding PM emissions predicated on this threshold.

In the 2014 Final Rule, the EPA concedes that Pennsylvania failed to determine whether the 0.1 lb/MMBtu emission limit actually represents BART for those facilities. *See* 79 Fed. Reg. 24 ,344 (" Here, Pennsylvania determined that PM BART for most of the subject -to-BART [electricity generating units] was their existing permitted emission limits

[9] After a state has identified the best available control technology for reducing emissions at a particular source, it must then set an "emission limit." This limit represents the emission-reduction capabilities of the identified control technology. *See* 2014 Final Rule, 79 Fed. Reg. 24,344 (stating that "once a state has selected a control technology that represents BART, the state must then complete the BART analysis by selecting an emission limit that represents the emission -reduction c apabilities of that control technology").

of 0.1 lb/MMBtu, which can be achieved by the existing [control technology]. While the EPA agrees with the commenter that Pennsylvania ideally should have examined whether 0.1 lb/MMBtu actually reflects the 'degree of reduction achievable' for the particular [control technology] at each facility, EPA thinks that Pennsylvania's failure to do so was not fatal in this instance . . . .") (footnote omitted). The EPA excuses this failure for two reasons. First, it argues that Pennsylvania's error was essentially harmless, as imposing a stricter PM emission limit on these sources would have minimal visibility impact in Class I areas since the PM emissions from these sources were responsible for only a minimal portion of the visibility impairment in these areas. Second, the EPA claims that the issue is "largely moot[]." *Id.* at 24,345. Specifically, the agency notes that many of these 13 power plants have retired or put in motion plans to retire or convert to cleaner burning fuels since Pennsylvania conducted its BART determinations. The EPA also notes that the remaining sources will have to comply with a more stringent PM emission limit of 0.03 lb/MMBtu by 2015 due to the implementation of the Mercury and Air Toxics Standards ("MATS") Rule. *Id.* at 24,344.

We find the EPA's arguments unconvincing. As discussed in greater detail *infra*, Part III.B.7, the EPA's claim of harmless error is unpersuasive since the agency has offered scant justification for this position, apart from its own assurances that the multiple flaws in Pennsylvania's analysis did not impact the reasonableness of its conclusions. Similarly, the EPA has not identified, nor have we located, any legal support for the EPA's contention that it may excuse errors in a state's BART analysis as moot based on events that are yet to transpire. To the contrary, the EPA has a

statutory obligation to disapprove a SIP that does not comply with the Clean Air Act and to promulgate a FIP if the deficiencies are not timely cured. *See* 42 U.S.C. § 7410(k) (requiring the EPA to review SIPs to ensure co mpliance); *id.* § 7410(l) (prohibiting the EPA from approving a revision to a SIP if it would interfere with any applicable requirement of the Clean Air Act).

3. Alternative Pollution Control Limits: BACT, LAER, and MACT

The Conservation Groups also contend Pennsylvania's BART analysis regarding PM emissions did not comply with the Guidelines because the state did not consider more stringent emission limits developed as part of separate air quality permitting processes under the Clean Air Act. In particular, they argue that limits imposed by other programs—known as best available control technology ("BACT"), lowest achievable emission rate ("LAER") , and maximum a chievable control technology ("MACT") —are relevant to the BART analysis because they demonstrate achievable emission reductions.[10]

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[10] BACT is "an emission limitation based on the maximum degree of reduction of each pollutant . . . which the permitting authority, on a case -by-case-basis, taking into account energy, environmental, and economic i mpacts and other costs, determines is achievable for [the] facility . . . ." 42 U.S.C. § 7479(3). Under the Clean Air Act's Prevention of Significant Deterioration program, no new major air pollutant emitting facility may be constructed unless the facility is equipped with BACT. *Alaska Dep't of Envtl.*

In response, the EPA notes that the BART Guidelines do not require states to consider the exact *emission limits* determined to be BACT and LAER. Instead, they must consider the *technologies* used to achieve BACT and LAER when conducting the first step of the BART analysis: identifying all available control technologies for their pollution sources. *See* BART Guidelines, 40 C.F.R. pt. 51, app. Y ("*Technologies* required as BACT or LAER are available for BART purposes and must be included as control alternatives.") (emphasis added). Moreover, the EPA notes that the stringent emission levels determined to be BACT or LAER are not necessarily achievable by BART-eligible sources because those programs apply to new and newly

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Conservation v. EPA, 540 U.S. 461, 468 (2004). In "nonattainment areas"—areas that are not in attainment with the Clean Air Act's National Ambient Air Quality Standards—new and modified pollution sources are required to install LAER, which is more stringent than BACT. *See Citizens Against Ruining the Env't v. EPA*, 535 F.3d 670, 673 n.3 (7th Cir. 2008). Under the Clean Air Act's National Emission Standards for Hazardous Air Pollutants program, the EPA imposes MACT on major sources of certain hazardous air pollutants. MACT "must reflect 'the maximum degree of reduction in emissions' that the EPA determines is 'achievable,' taking into consideration 'the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements.'" *Nat'l Res. Def. Council v. EPA*, 749 F.3d 1055, 1057 (D.C. Cir. 2014) (quoting 42 U.S.C. § 7412(d)(2)).

modified s ources, while BART governs pollution sources constructed before 1977.

The EPA also notes that, for sources of PM emission s that are subject to MACT standards, the BART Guidelines permit—but do not require —states to rely on the stringent MACT standards for purposes of BART. In other words, the Guidelines create a presumption that a state's reliance on the MACT standards satisfies BART, but they do not require the state to rely on the MACT standard to satisfy BART. *See* BART Guidelines, 40 C.F.R. pt. 51, app. Y ("We believe that, in many cases, it will be unlikely that States will identify emission controls more stringent than the MACT standards without identifying control options that would cost many thousands of dollars per ton. Unless there are new technologies subsequent to [issuance of] the MACT standards which would lead to cost -effective increases in the level of control, you may rely on the MACT standards for purposes of BART.").

We agree with the EPA's reading of the BART Guidelines on th ese points. As a result, we reject t he Conservation Groups' contention that Pennsylvania improperly failed to consider BACT , LAER, and MACT emission limitations.

4. Cost-Effectiveness Threshold

The Conservation Groups argue that Pennsylvania failed to properly evalu ate the cost -effectiveness of the pollution controls available for each BART -eligible source. In particular, they note that Pennsylvania did not set a "threshold" for cost -effectiveness—that is, an amount of money at which it would reject any available co ntrol option

as too expensive. Absent such a threshold, the Conservation Groups contend, Pennsylvania had no principled way of determining when a pollution control was a cost-effective method of improving visibility in affected Class I areas.

The EPA asserts that nothing in the Clean Air Act requires Pennsylvania to set a fixed threshold of cost-effectiveness, and that the Guidelines make no mention of such a threshold in their instructions on how to evaluate cost-effectiveness. *See* BART Guidelines, 40 C.F.R. pt. 51, app. Y; *Nat'l Parks Conservation Ass'n v. EPA*, 788 F.3d 1134, 1142 (9th Cir. 2015) ("To be sure, the Act and the Regulations do not specifically require that EPA explain its cost-effectiveness decisions through use of a 'bright line' rule."). Instead of drawing a line in the sand on cost-effectiveness, the EPA notes that Pennsylvania's SIP appropriately determined that pollution "sources with a higher degree of potential visibility improvement from control would justify higher cost controls," and that "only low cost controls would be justified for sources with a lower degree of potential visibility improvement." App. 100.

Because we agree that Pennsylvania was not compelled to set a threshold for cost-effectiveness, we conclude that the EPA did not act arbitrarily by approving Pennsylvania's SIP absent such a threshold.

5. Cost-Effectiveness Metric

The Conservation Groups also assert that Pennsylvania used an improper metric when calculating the cost-effectiveness of additional pollution controls. Specifically, they argue that Pennsylvania evaluated the cost of controls based on the dollars-per-deciview metric rather than the

dollars-per-ton metric required by the Guidelines.[11] The Conservation Groups contend that Pennsylvania's use of the dollars-per-deciview metric distorted the true cost of pollution controls and led to the state's conclusion that additional pollution controls were not warranted at any of the BART-eligible sources.

In responding to this argument during the notice-and-comment period and now on appeal, the EPA has taken seemingly inconsistent positions. In the text of the 2014 Final Rule, the EPA states, without elaboration, that Pennsylvania's use of the dollars-per-deciview metric was "flawed." 2014 Final Rule, 79 Fed. Reg. 24,342 (stating that "EPA agrees with the commenters that Pennsylvania's reliance on the [dollars-per-deciview] metric was flawed for multiple reasons"). On appeal, however, the EPA responds that the Guidelines specify that cost-effectiveness calculations be expressed in terms of dollars-per-ton, but they do not forbid the consideration of the dollars-per-deciview metric as well.[12]

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[11] As its name implies, the dollars-per-ton metric is a measurement of the costs associated with removing a ton of a particular pollutant from a source's emission. The dollars-per-deciview metric, by contrast, considers the costs associated with pollution reduction that would result in a 1.0 deciview visibility improvement. The dollars-per-ton metric is frequently abbreviated as "$/ton," while the dollars-per-deciview metric is abbreviated as "$/dv."

[12] As the Tenth Circuit has noted, the Guidelines "permit the BART-determining authority to use dollar per deciview as an optional method of evaluating cost effectiveness." *Oklahoma v. EPA*, 723 F.3d 1201, 1221 (10th

Cir. 2013) (citing 40 C.F.R. pt. 51, app. Y(IV)(E)(1)). As to the issue of whether states are *required* to use the dollars-per-ton metric in evaluating cost -effectiveness, how ever, "[t]he guidelines themselves are a bit unclear." *Id*. at 1221 n.13. The Tenth Circuit explains:

> In the section on cost effectiveness, the guidelines mention only the dollar -per-ton metric. 40 C.F.R. pt. 51 app. Y(IV)(D)(4)(c). However, the guidelines later state that, in evaluating alternatives, "we recommend you develop a chart (or charts) displaying for each of the alternatives" that includes, among other factors, the cost of compliance defined as "compliance—total annualized costs ($), cost effec tiveness ($/ton), and incremental cost effectiveness ($/ton), *and/or* any other cost -effectiveness measures (such as $/deciview)." *Id.* app. Y(IV)(E)(1) (emphasis added).

Id.

The EPA also notes that Pennsylvania considered both metrics with respect to 33 of its 34 BART-eligible sources. Resp. Br. 46.

Our review of the EPA's decision is limited to the reasoning supplied in its final rule, not the justifications subsequently crafted and proffered by the agency's appellate counsel. *See Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 50 ("It is well-established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself.") (citations omitted); *Safe Air for Everyone v. EPA*, 488 F.3d 1088, 1091 (9th Cir. 2007) (stating that "our review of an administrative agency's decision begins and ends with the reasoning that the agency relied upon in making that decision"). As a result, we are left with the EPA's conclusion that Pennsylvania's use of the dollars-per-deciview metric is "flawed" in multiple unidentified respects and no meaningful explanation as to why the EPA ignored these flaws. This rationale is insufficient to justify the EPA's approval of Pennsylvania's analysis of cost-effectiveness.

6. Cumulative Visibility Impact

As part of its source-specific BART analysis, Pennsylvania was required to calculate the visibility improvement that could be achieved in Class I areas by implementing additional pollution controls at its BART-eligible sources. The state's calculations for each source, however, took into account only the potential impact such controls would have on the visibility in the Class I area *most severely impacted* by the source. Pennsylvania did not consider the "cumulative visibility impact"—that is, it did not calculate the total visibility improvement for *all* affected Class I areas that would result from installing additional

controls at each source. As a result, the Conservation Groups argue, Pennsylvania underestimated the visibility impact of each source and, correspondingly, underestimated the cost - effectiveness of additional control technologies.

In the 2014 Final Rule, the EPA admits that Pennsylvania should have calculated the cumulative visibility impact from its sources. 79 Fed. Reg. 24,342 ("EPA also agrees with the commenters that, in considering the visibility improvement expected from the use of controls, Pennsylvania should have taken into account the visibility impacts at all impacted Class I areas rather than focusing solely on the benefits at the most impacted area."). The EPA contends this error, among others, was harmless, a contention we address below.

7. Harmless Error

To justify its approval of Pennsylvania's admittedly flawed BART analysis, the EPA advances a harmless error argument. In particular, the EPA contends it reasonably approved Pe nnsylvania's conclusion that pollution controls were not warranted as the overall picture that emerged from the state's analysis demonst rated that the improvement in visibility at affected Class I areas as a result of the controls would be minimal. Based on the administrative record before us, however, that conclusion is a bridge too far.

In the 2014 Final Rule, the EPA concedes that Pennsylvania's BART determinations contained "system ic deficiencies" and a "large number" of errors. 79 Fed. Reg. 24,341, 24,343 (quotation marks omitted). On a broad scale, the EPA acknowledges that Pennsylvania's SIP lacked necessary technical information and supporting

documentation, and that it was insufficiently thorough. *Id.* at 24,342 (noting that "many of the comments criticizing Pennsylvania's BART determinations are correct," and that "the Pennsylvania regional haze SIP contains very limited information describing Pennsylvania's analyses and consideration of the BART factors"); *id.* (stating "Pennsylvania should have provided a more thorough and detailed analysis of costs and visibility impacts in its regional haze SIP"). More specifically, the EPA concedes that Pennsylvania erred at multiple steps of the BART analysis. For example, by failing to consider the cumulative visibility impact of each source, Pennsylvania understated the impact that pollution originating within its borders had on Class I areas beyond those borders. *Id.* ("EPA also agrees . . . that . . . Pennsylvania should have taken into account the visibility impacts at all impacted Class I areas rather than focusing solely on the benefits at the most impacted area."). The EPA also admits that Pennsylvania's cost-effectiveness calculations were flawed. *Id.* ("Similarly, EPA agrees with the commenters that Pennsylvania's reliance on the $/dv metric was flawed for multiple reasons."); *id.* (agreeing with the commenters "that many of the [pollution] controls under consideration [by Pennsylvania] were likely cost-effective measures," even though the state rejected them as too expensive).

Tellingly, the EPA concedes that these various failures impaired its ability to independently assess Pennsylvania's analysis. In the agency's own words, it has a duty under the Clean Air Act "to exercise independent technical judgment in evaluating the adequacy of a state's regional haze SIP, including its BART determinations." *Approval, Disapproval and Promulgation of Implementation Plans; State of*

Wyoming; Regional Haze State Implementation Plan; Federal Implementation Pl an for Regional Haze , 79 Fed. Reg. 5,032, 5,064 (Jan. 30, 2014) . Here, however, with respect to the control technologies considered by Pennsylvania and the costs associated with those controls, the EPA concedes that "the cursory information available in t he record does not allow for an assessment of how these numbers were derived or whether Pennsylvania's analyses were reasonably done." 2014 Final Rule, 79 Fed. Reg. 24,342. Regarding Pennsylvania's determination of potential visibility improvements in Cl ass I areas, the EPA similarly notes that "it is difficult to assess the estimates of the improvements in visibility associated with various controls given the limited information in the SIP as to the assumptions relied on in the modeling and the summary n ature of the results provided." *Id.* Likewise, regarding Pennsylvania's estimates of the costs of implementing certain pollution controls, the EPA laments: " Unfortunately, where controls were estimated to be more cost -effective, EPA cannot assess the exte nt to which Pennsylvania's analyses are reasonable estimates for purposes of making a BART determination." *Id.*

Despite the multitude of problems with Pennsylvania's SIP, and the EPA's admitted inability to adequately assess the state's analysis, the EPA asserts that "the information that Pennsylvania did provide" is sufficient to conclude "that Pennsylvania's ultimate BART determinations were nevertheless reasonable." *Id.* Without citation to supporting authorities or further explanation, the EPA broadly claims that, "based on the cost estimates for other BART sources in other states" it has reviewed, "Pennsylvania's cost numbers appear to be generally consistent for such controls . . . ." *Id.*

The EPA further concludes that "[w]here Pennsylvania estimated the costs of controls to be in the tens of thousands or hundreds of thousands of dollars per ton of pollutant removed, Pennsylvania's conclusions that such controls are not cost-effective seem reasonable, even assuming that the true cost[s] of controls are likely less than what Pennsylvania estimated." *Id.*

As a reviewing court, we must ensure that the EPA "articulate[s] a satisfactory explanation" for its decision to approve Pennsylvania's SIP, "including a rational connection between the facts found and the choice made." *Prometheus Radio Project*, 373 F.3d at 389–90 (citation and quotation marks omitted). The EPA's conclusory assertions on the issue of control costs and its invocation of its own experience addressing cost estimates do not suffice. *See Natural Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988) (per curiam) ("[C]onclusory remarks . . . do not equip a decisionmaker to make an informed decision about alternative courses of action or a court to review the [agency's] reasoning."); *see also Ass'n of Private Colleges & Univs. v. Duncan*, 870 F. Supp. 2d 133, 154 (D.D.C. 2012) ("That this explanation could be used to justify any [determination] at all demonstrates its arbitrariness."); *Nat'l Parks Conservation Ass'n*, 788 F.3d at 1145 (remanding where the "reasoning fails to reveal to a reader how EPA determined that the cost of controls were not justified").

The EPA also asserts that "[w]hen the other key BART factor—visibility—is taken into account, . . . an overall picture emerges that supports Pennsylvania's BART determinations." 2014 Final Rule, 79 Fed. Reg. 24,342. In essence, the EPA contends that, given Pennsylvania's calculations showing that its BART-eligible sources had

minimal visibility impact at Class I areas, it was reasonable to conclude that additional pollution controls were unwarranted.

We are unpersuaded by this reasoning. As noted above, the 2014 Final Rule repeatedly criticizes Pennsylvania's SIP calculations and supporting documentation, noting tha t the SIP is so lacking that it is difficult to assess the visibility impact calculations Pennsylvania did conduct. What the EPA could determine, however, was that Pennsylvania underestimated the impact of pollution from its sources because it failed to c alculate the cumulative visibility impact from each source. The EPA now urges us to rely on these very same visibility impact calculations to conclude that the "overall picture" supports Pennsylvania's BART analysis. The EPA unconvincingly insists we rely on what it has said is flawed.[13]

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[13] The EPA also argues that because 26 of Pennsylvania's 34 BART-eligible sources had less than a 0.5 deciview impact on any Class I area, the state could have exempted these 26 sources from its BART analysis. Under the agency's own regulations and the BART Guidelines, however, a state need not exempt these sources. *See, e.g.*, Regional Haze Regulations, 70 Fed. Reg. 39,104, 39,107 ("States certainly have the discretion to consider that all BART-eligible sources within the State are 'reasonably anticipated to cause or contribute' to some degree of visibility impairment in a Class I area ."); BART Guidelines, 40 C.F.R. pt. 51, app. Y ("Once you have compiled your list of BART - eligible sources, you need to determine whether . . . to make BART determinations for all of them . . . .").

In the end, the EPA has identified a host of problems with Pennsylvania's BART analysis. What it has not done, however, is provide a sufficient explanation as to why it overlooked these problems and approved Pennsylvania's SIP. Because we, as a reviewing court, need an agency to show its work before we can accept its conclusions, we will remand this case to the EPA for further consideration.

IV.

For the aforementioned reasons, we will vacate the 2014 Final Rule to the extent it approved Pennsylvania's source-specific BART analysis and remand to the EPA for further proceedings consistent with this Opinion.

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]; Bianco, Karen[Bianco.Karen@epa.gov]
From: Graham, Cheryl
Sent: Mon 10/2/2017 5:36:19 PM
Subject: Agenda AFTER Assistants Meeting
17-10-02 agenda.docx

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]; Bianco, Karen[Bianco.Karen@epa.gov]
Cc: Hooks, Samantha[hooks.samantha@epa.gov]
From: Graham, Cheryl
Sent: Mon 10/2/2017 2:42:23 PM
Subject: Agenda FOR Assistants Meeting
17-10-02 agenda .docx

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Dubey, Susmita[dubey.susmita@epa.gov]
From: Graham, Cheryl
Sent: Wed 10/18/2017 10:37:25 AM
Subject: Deadline Summaries for Front Office Weekly Report
17-10-23 agenda.docx

Attached is the redline/strikeout draft of next week's reg agenda. Please provide summaries for the Front Office Weekly Report covering deadlines between 10/18/17 – 11/3/17 by 1:00 today. Thanks

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Mon 10/2/2017 11:38:42 AM
Subject: REMINDER: 10/2/17 Reg Review Agenda Updates
17-10-02 agenda .docx

Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am today. Reg Review is scheduled for today (10/2) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Mon 8/14/2017 4:52:41 AM
Subject: 08/14/17 Reg Review Agenda Updates
17-08-14 agenda.docx

Attached is the strikeout version of the reg agenda, if you have any additions/deletions please let Sam know by 11:00am today and cc me. I am off today for a funeral. Reg Review is scheduled for today (8/14) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Thur 10/12/2017 3:31:17 PM
Subject: 10/16/17 Reg Review Agenda Updates
17-10-16 agenda.docx

Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Monday. Reg Review is scheduled for Monday (10/16) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]
Cc: Zenick, Elliott[Zenick.Elliott@epa.gov]; Doster, Brian[Doster.Brian@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Orlin, David[Orlin.David@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]; Bianco, Karen[Bianco.Karen@epa.gov]
From: Graham, Cheryl
Sent: Wed 10/11/2017 12:57:03 PM
Subject: Reg review agenda
17-10-09 agenda.docx

Cheryl R. Graham

From: Srinivasan, Gautam
Sent: Wednesday, October 11, 2017 8:54 AM
To: Lee, Michael <lee.michaelg@epa.gov>
Cc: Zenick, Elliott <Zenick.Elliott@epa.gov>; Graham, Cheryl <Graham.Cheryl@epa.gov>; Doster, Brian <Doster.Brian@epa.gov>; Rodman, Sonja <Rodman.Sonja@epa.gov>; Smith, Kristi <Smith.Kristi@epa.gov>; McConkey, Diane <Mcconkey.Diane@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Schmidt, Lorie <Schmidt.Lorie@epa.gov>; Bianco, Karen <Bianco.Karen@epa.gov>
Subject: Re: Hot Issues- Any items for the agenda?

Yes, reg review today, hot issues tomorrow.

++++++++++++++

202-564-5647 (o)

202-695-6287 (c)

On Oct 11, 2017, at 8:46 AM, Lee, Michael <lee.michaelg@epa.gov> wrote:

> I thought that was the plan (i.e., to have reg review today and hot issues tomorrow).
>
> Mike
>
> Michael G. Lee | U.S. Environmental Protection Agency
> Office of General Counsel | (202) 564-5486
>
> -----Original Message-----

From: Zenick, Elliott
Sent: Wednesday, October 11, 2017 8:42 AM
To: Graham, Cheryl <Graham.Cheryl@epa.gov>; Doster, Brian <Doster.Brian@epa.gov>; Lee, Michael <lee.michaelg@epa.gov>; Rodman, Sonja <Rodman.Sonja@epa.gov>; Smith, Kristi <Smith.Kristi@epa.gov>; McConkey, Diane <Mcconkey.Diane@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Srinivasan, Gautam <Srinivasan.Gautam@epa.gov>; Schmidt, Lorie <Schmidt.Lorie@epa.gov>; Bianco, Karen <Bianco.Karen@epa.gov>
Subject: RE: Hot Issues- Any items for the agenda?

There was some suggestion yesterday at the assistants meeting that we might flip the two of them.

-----Original Message-----
From: Graham, Cheryl
Sent: Wednesday, October 11, 2017 8:41 AM
To: Zenick, Elliott <Zenick.Elliott@epa.gov>; Doster, Brian <Doster.Brian@epa.gov>; Lee, Michael <lee.michaelg@epa.gov>; Rodman, Sonja <Rodman.Sonja@epa.gov>; Smith, Kristi <Smith.Kristi@epa.gov>; McConkey, Diane <Mcconkey.Diane@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Srinivasan, Gautam <Srinivasan.Gautam@epa.gov>; Schmidt, Lorie <Schmidt.Lorie@epa.gov>; Bianco, Karen <Bianco.Karen@epa.gov>
Subject: RE: Hot Issues- Any items for the agenda?

Reg review is scheduled for tomorrow at 4. Are you trying to switch?

Cheryl R. Graham

-----Original Message-----
From: Zenick, Elliott
Sent: Wednesday, October 11, 2017 8:20 AM
To: Graham, Cheryl <Graham.Cheryl@epa.gov>; Doster, Brian <Doster.Brian@epa.gov>; Lee, Michael <lee.michaelg@epa.gov>; Rodman, Sonja <Rodman.Sonja@epa.gov>; Smith, Kristi <Smith.Kristi@epa.gov>; McConkey, Diane <Mcconkey.Diane@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Srinivasan, Gautam <Srinivasan.Gautam@epa.gov>; Schmidt, Lorie <Schmidt.Lorie@epa.gov>; Bianco, Karen <Bianco.Karen@epa.gov>
Subject: RE: Hot Issues- Any items for the agenda?

Are we going to do reg review or hot issues at today's hot issues slot?

-----Original Message-----
From: Graham, Cheryl
Sent: Wednesday, October 11, 2017 6:32 AM
To: Doster, Brian <Doster.Brian@epa.gov>; Zenick, Elliott <Zenick.Elliott@epa.gov>; Lee, Michael <lee.michaelg@epa.gov>; Rodman, Sonja <Rodman.Sonja@epa.gov>; Smith, Kristi <Smith.Kristi@epa.gov>; McConkey, Diane <Mcconkey.Diane@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Srinivasan, Gautam <Srinivasan.Gautam@epa.gov>; Schmidt, Lorie <Schmidt.Lorie@epa.gov>; Bianco, Karen <Bianco.Karen@epa.gov>

Subject: Hot Issues- Any items for the agenda?

Cheryl R. Graham

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]
Cc: Hooks, Samantha[hooks.samantha@epa.gov]; Motley, Judy[motley.judy@epa.gov]
From: Graham, Cheryl
Sent: Mon 9/25/2017 3:42:58 PM
Subject: Agenda FOR Assistants Meeting
17-09-25 agenda .docx

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]
Cc: Hooks, Samantha[hooks.samantha@epa.gov]
From: Graham, Cheryl
Sent: Tue 10/10/2017 3:34:22 PM
Subject: Agenda FOR Assistants Meeting
17-10-09 agenda.docx

Cheryl R. Graham

OGC/ARLO

(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Thur 10/19/2017 10:27:43 AM
Subject: 10/23/17 Reg Review Agenda Updates
17-10-23 agenda.docx

Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Monday. Reg Review is scheduled for Monday (10/23) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]
Cc: Hooks, Samantha[hooks.samantha@epa.gov]; Motley, Judy[motley.judy@epa.gov]
From: Graham, Cheryl
Sent: Mon 9/11/2017 3:40:24 PM
Subject: Agenda FOR Assistants Meeting
17-09-11 agenda.docx

Cheryl R. Graham
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(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Thur 9/28/2017 1:01:58 PM
Subject: 10/2/17 Reg Review Agenda Updates
17-10-02 agenda .docx

Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Monday. Reg Review is scheduled for Monday (10/2) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Mon 9/11/2017 10:37:55 AM
Subject: REMINDER: 09/11/17 Reg Review Agenda Updates
17-09-11 agenda.docx

Attached is the strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am today. Reg Review is scheduled for today (9/11) at 1:00pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Thur 9/21/2017 4:12:39 PM
Subject: 09/25/17 Reg Review Agenda Updates
17-09-25 agenda .docx

Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Monday. Reg Review is scheduled for Monday (9/25) at 2:30pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Fri 9/8/2017 7:15:50 PM
Subject: 09/11/17 Reg Review Agenda Updates
17-09-11 agenda.docx

Attached is the strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Monday. Reg Review is scheduled for Monday (9/11) at 1:00pm in room 4045.

Thank you

Cheryl R. Graham
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(202) 564-5473

WildEarth Guardians v. United States EPA

United States Court of Appeals for the Tenth Circuit

October 21, 2014, Filed

Nos. 12-9596, 13-9502, 13-9506, 13-9507, 13-9508, 13-9509, 13-9510

Reporter
770 F.3d 919 *; 2014 U.S. App. LEXIS 20145 **; 44 ELR 20229; 79 ERC (BNA) 1493

WILDEARTH GUARDIANS; HEAL UTAH; NATIONAL PARKS CONSERVATION ASSOCIATION; POWDER RIVER BASIN RESOURCE COUNCIL; SIERRA CLUB; Petitioners, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; GINA McCARTHY, Administrator, United States Environmental Protection Agency, Respondents.PUBLIC SERVICE COMPANY OF NEW MEXICO; PACIFICORP; NEW MEXICO ENVIRONMENT DEPARTMENT; BASIN ELECTRIC POWER COOPERATIVE; STATE OF WYOMING; UTAH ASSOCIATED MUNICIPAL POWER SYSTEM; UTAH DIVISION OF AIR QUALITY; CITY OF ALBUQUERQUE, Intervenors, and AMERICAN COALITION FOR CLEAN COAL ELECTRICITY, Amicus Curiae.

Prior History: **[**1]** PETITIONS FOR REVIEW OF FINAL DECISIONS ISSUED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. Nos. EPA-R06-OAR-2009-0050, EPA-R08-OAR-2011-0400, EPA-R08-OAR-2011-0114, EPA-RO6-OAR-2008-0702.

Case Summary

Overview
HOLDINGS: [1]-Approval was proper under the Clean Air Act of a regional cap-and-trade program regulating sulfur-dioxide emissions as better than installation of the best available retrofit technology (BART) since the presumptive BART benchmark was appropriate, comparison of BART to the alternative measure through a standard of clear weight of the evidence was proper, and the participants properly considered qualitative factors in determining the effectiveness of the cap-and-trade program; [2]-The fact that only a small number of eligible entities elected to participate in the cap-and-trade program did not establish a probable failure of the program and no specific number of participating entities was necessary for approval of the program.

Outcome
Petitions for review denied.

Counsel: Jenny K. Harbine, Earthjustice, Bozeman, Montana (John Barth, Hygiene, Colorado, and Ashley D. Wilmes, WildEarth Guardians, Boulder, Colorado, with her on the briefs), for Petitioners.

Chloe H. Kolman, United States Department of Justice, Environment & Natural Resources Division, Washington, D.C. (Stephanie J. Talbert, United States Department of Justice, Environment & Natural Resources Division, Washington, D.C., Robert G. Dreher, Acting Assistant Attorney General, United States Department of Justice, Environment & Natural Resources Division, Washington, D.C.; M. Lea Anderson, Of Counsel, United States Environmental Protection Agency, Washington, D.C.; Matthew C. Marks, Of Counsel, United States Environmental Protection Agency, Washington, D.C.; Brian Tomasovic, Of Counsel, United States Environmental Protection Agency, Dallas, Texas; Sara L. Laumann, Of Counsel, United States Environmental Protection Agency, Denver, Colorado, with her on the brief), for Respondent.

E. Blain Rawson, Ray Quinney **[**2]** & Nebeker, P.C., Salt Lake City, Utah (Emily Smith Loeffler, Quinney & Nebeker, P.C., Salt Lake City, Utah, Michael G. Jenkins, Assistant General Counsel, PacifiCorp Energy with him on the brief), for Intervenor PacifiCorp Energy.

Matthias L. Sayer, Assistant Attorney General, Wyoming Office of Attorney General, Cheyenne, Wyoming (Jay A. Jerde, Deputy Attorney General, Wyoming Office of Attorney General, Cheyenne, Wyoming, with him on the brief), for Intervenor State of Wyoming.

Christopher L. Colclasure, Holland & Hart LLP, Denver, Colorado, for Intervenor Basin Electric Power Cooperative.

Richard L. Alvidrez and Robert H. Clark, Miller Stratvert P.A., Albuquerque, New Mexico; Kallie H. Kuehl, Corporate Counsel, Albuquerque, New Mexico, on the brief for Intervenor Public Service Company of New Mexico.

Jeffrey M. Kendall, General Counsel and William G. Grantham, Assistant General Counsel, for New Mexico Environment Department, on the brief for Intervenor New

Mexico Environment Department.

Carol Parker, Assistant City Attorney and Adelia W. Kearny, Deputy City Attorney, Albuquerque, New Mexico, on the brief for Intervenor City of Albuquerque.

H. Michael Keller and Mary Jane E. Galvin-Wagg, **[**3]** Van Cott, Salt Lake City, Utah; Mason Baker, General Counsel, Salt Lake City, Utah, on the brief for Intervenor Utah Associated Municipal Power Systems.

John E. Swallow, Utah Attorney General and Christian C. Stephens, Assistant Attorney General, Salt Lake City, Utah; Craig W. Anderson, Division Chief and Assistant Attorney General, Environment Division, Utah Attorney General's Office, Salt Lake City, Utah, on the brief for Intervenor Utah Division of Air Quality.

Paul M. Seby and Marian C. Larsen, Seby Larsen LLP, Denver, Colorado, on the brief for Amicus Curiae American Coalition for Clean Coal Electricity.

Judges: Before BACHARACH, SEYMOUR, and MURPHY, Circuit Judges.

Opinion by: BACHARACH

Opinion

[*923] BACHARACH, Circuit Judge.

This appeal grows out of the Clean Air Act. In an effort to comply with the statute, three states (New Mexico, Utah, and Wyoming), one city (City of Albuquerque), and one county (Bernalillo County) adopted a regional cap-and-trade program regulating sulfur-dioxide emissions over the Colorado Plateau.[1] Under this program, each participant obtained a ceiling on sulfur-dioxide emissions. If the ceiling was met, polluters would get allocations of sulfur dioxide that could be emitted. With these allocations, **[**4]** polluters had a choice. They could use the allocations or cut emissions and trade the unused portions of the allocations.

The program required approval of the Environmental Protection Agency. In determining whether to approve the program, the EPA had to apply its regulations. Under these regulations, states could satisfy the Clean Air Act by ensuring installation of the best available retrofit technology in all eligible major sources that contributed to visibility impairment. This mode of compliance is referred to as "BART." States affecting visibility over the Colorado Plateau were allowed to use an alternative program in lieu of BART. But this alternative program had to be better than BART in improving air visibility.

New Mexico, Utah, Wyoming, the City of Albuquerque, and Bernalillo County persuaded the EPA that the trading program would yield better results than BART because:

- the program covered polluters that would not have been subject to BART,
- the program encompassed emissions from new sources, which would not have been subject to BART, and
- the program encouraged polluters to expedite equipment upgrades and to operate below full capacity.

Five environmental groups filed **[**5]** petitions for review,[2] arguing that the EPA should not have approved the trading program. To decide these petitions, we must determine whether the EPA acted arbitrarily and capriciously in finding that the trading program was better than BART. We conclude that the EPA's decision was neither arbitrary nor capricious. Thus, we deny the petitions for review.

I. The Clean Air Act and the EPA's Regulatory Framework

The petitions require an understanding of the statutory and regulatory requirements for alleviation of air pollution.

[*924] A. Statutory Requirement for EPA Guidelines

The Clean Air Act requires the EPA to establish regulations to ensure "reasonable progress" toward the improvement in visibility and "compliance with the requirements of [*42 U.S.C. § 7491*]."[3] *42 U.S.C. § 7491(a)(4)*. In light of this requirement, the EPA had to establish regulations requiring states to develop implementation plans to improve visibility

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[1] *Final Rule, Approval and Promulgation of State Implementation Plans; Wyoming, 77 Fed. Reg. 73,926, 73,926 (Dec. 12, 2012)*; ***Final Rule, Approval, Disapproval and Promulgation of State Implementation Plans; Utah, 77 Fed. Reg. 74,355, 74,355 (Dec. 14, 2012)***; *Final Rule, Approval and Promulgation of State Implementation Plans; New Mexico, 77 Fed. Reg. 70,693, 70,693 (Nov. 27, 2012)*; *Final Rule, Approval and Promulgation of State Implementation Plans; City of Albuquerque-Bernalillo County, 77 Fed. Reg. 71,119, 71,119 (Nov. 29, 2012)*.

[2] The Petitioners are WildEarth Guardians, Heal Utah, National Parks Conservation Association, Powder River Basin Resource Council, and Sierra Club.

[3] "Reasonable progress" is measured by comparing "the costs of compliance, the time necessary for compliance, **[**6]** . . . the energy and nonair quality environmental impacts of compliance, and the remaining useful life of any existing [regulated] source" (known as the "four factors"). *See* *42 U.S.C. § 7491(g)(1)*; *40 C.F.R. § 51.308(d)(1)(i)(A)*.

and adopt, maintain, and enforce air quality standards. *Id.* §§ 7410(a)(1), 7491.

Under the statutory scheme, the EPA would then review the state implementation plans to ensure compliance with the Clean Air Act and implementing regulations. *Id.* §§ 7410(a)(3)(B), 7492(e)(2); *see* Oklahoma v. EPA, 723 F.3d 1201, 1204 (10th Cir. 2013). Once approved, state implementation plans would be enforceable as federal law. 42 U.S.C. §§ 7413, 7604.

States implementing the BART requirement do so in two steps: (1) identify the sources subject to BART, and (2) determine the particular technologies required for individual sources. 40 C.F.R. § 51.308(e)(1); *see* Util. Air Regulatory Grp. v. EPA, 471 F.3d 1333, 1335-36, 374 U.S. App. D.C. 85 (D.C. Cir. 2006). In considering the required technologies, states must consider five factors for each BART-eligible source:

(1) the costs of compliance;
(2) the energy and nonair quality environmental impacts of compliance;
(3) the existing pollution control technologies already in place;
(4) the remaining useful life of the source; and
(5) the improvement in visibility anticipated from the use of given technologies.

42 U.S.C. § 7491(g)(2).

B. Regulations Governing the Colorado Plateau

Congress also enacted legislation requiring the EPA to establish a visibility transport commission to study regional haze in the Grand **[**7]** Canyon and to recommend curative action. 42 U.S.C. § 7492(f).

To comply, the EPA established the Grand Canyon Visibility Transport Commission, which would "assess scientific, technical, and other information related to adverse visual air quality impacts from potential or projected emissions growth from sources located in the Transport Region." Joint App. at 71. Upon completion of this assessment, the Transport Commission would report to the EPA on appropriate measures to improve visual air quality on the Colorado Plateau. *Id.*[4]

1. The Grand Canyon Visibility Transport Commission

The Transport Commission analyzed the effects of regional haze in sixteen Class I areas [5] affected by pollution in nine states **[*925]** (Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and Wyoming). [6] 42 U.S.C. § 7492(c)(1); Final Rule, Regional Haze Regulations, 64 Fed. Reg. 35,714, 35,770 (July 1, 1999).

Based on this analysis, the Transport Commission recommended a regional cap-and-trade program for sulfur dioxide that would go into effect when participating states exceed an emissions target. Joint App. at 56. Details of the program would be worked out later.

The functions of the Transport Commission were passed on to the Western Regional Air Partnership, which continued the study and recommended a plan. *Id.* at 190. The plan included:

(1) milestones to measure reductions in regional emissions of sulfur dioxide, and
(2) a trading program for the nine states.

The trading program acted as a "backstop," which would be triggered only if the milestones were reached.

2. The Regional Haze Rule [9]**

In 1999, the EPA adopted the Transport Commission's recommendations in its Regional Haze Rule, 40 C.F.R. §§ 51.308, 51.309. This rule requires states to develop programs that assure reasonable progress toward meeting the national goal of addressing visibility impairment in Class I areas. 40 C.F.R. § 51.300(a). Sections 51.308 and 51.309 create two methods of compliance.

Under the first method, states can submit an implementation plan containing emission limitations applying BART for each BART-eligible source impairing visibility in a Class I area. 40

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[4] The EPA expanded the scope of the Grand Canyon Visibility Commission's review to include sixteen Class I areas in the vicinity of the Grand Canyon. With this expansion, the Commission addressed visual air quality in the "Golden Circle" of parks and wilderness areas in the Colorado Plateau. *See* ***Notice of Meeting, Grand Canyon Visibility Transport Commission, 56 Fed. Reg. 57,522, 57,523 (Nov. 12, 1991).***

[5] Class I federal areas include all regions as of August 7, 1977, consisting of national wilderness areas and national memorial parks exceeding 5,000 **[**8]** acres, national parks exceeding 6,000 acres, and international parks. *See* 42 U.S.C. § 7472(a).

[6] The sixteen Class I areas are the Grand Canyon National Park, Sycamore Canyon Wilderness, Petrified Forest National Park, Mount Baldy Wilderness, San Pedro Parks Wilderness, Mesa Verde National Park, Weminuche Wilderness, Black Canyon of the Gunnison Wilderness, West Elk Wilderness, Maroon Bells Wilderness, Flat Tops Wilderness, Arches National Park, Canyonlands National Park, Capital Reef National Park, Bryce Canyon National Park, and Zion National Park. 40 C.F.R. § 51.309(b)(1).

C.F.R. § 51.308(e).

The second method is authorized in 40 C.F.R. § 51.309. Through this method, states could use the Transport Commission's cap-and-trade program if participants would expect better results than they would have had under BART regulations. The cap-and-trade program is known as the "309 program."[7]

The 309 program establishes voluntary measures to reduce sulfur-dioxide emissions through milestones providing "steady and continuing emissions reductions through 2018." 40 C.F.R. § 51.309(d)(4)(i). After 2018, the milestone remains constant until the states submit revised implementation plans. *Id.* § 51.309(d)(4)(vi)(A). These milestones must provide **[**10]** a "50 to 70 percent reduction in [sulfur dioxide] emissions from 1990 actual emission levels by 2040." *Id.* § 51.309(d)(4)(i).

If sulfur-dioxide emissions surpass the milestone, a backstop regional emission trading program would be triggered. Under the program, sources are given a set volume of emissions. Any source exceeding its allowance must pay a penalty and suffer a loss in its allotted emissions. Joint App. at 226-27. To encourage early reductions in emissions, the trading program provided additional allocations to **[*926]** sources that reduce emissions ahead of schedule.

Upon approval of an implementation plan, the EPA would regard the state to be in compliance through 2018 with the reasonable-progress requirement for the sixteen Class I areas encompassed in the 309 program. 40 C.F.R. § 51.309(a). For additional Class I areas not covered in the 309 program, the state had to show long-term strategies under § 51.308. *Id.* § 51.309(g).

3. The D.C. Circuit Court's Rulings

After the Western Regional Air Partnership submitted its report, Arizona, New Mexico, Oregon, Utah, Wyoming, the City of Albuquerque, and Bernalillo County chose to participate in the 309 program. Before the EPA acted on these participants' submissions, the D.C. Circuit Court of Appeals invalidated part **[**11]** of the § 51.308(e) methodology (requiring evaluation of progress by considering emission reductions in the aggregate). *Am. Corn Growers Ass'n v. EPA*, 291 F.3d 1, 8-9, 351 U.S. App. D.C. 351 (D.C. Cir. 2002).

The EPA continued to apply the invalidated methodology in the context of determining whether the 309 program was better than BART, but the D.C. Circuit Court of Appeals again struck down the EPA's action in *Center for Energy & Economic Development v. EPA*, 398 F.3d 653, 660, 365 U.S. App. D.C. 65 (D.C. Cir. 2005). There the court upheld the EPA's view that an alternative program could satisfy the reasonable progress goals. But, the court held that the EPA should not have used the invalidated methodology. *Ctr. for Energy & Econ. Dev.*, 398 F.3d at 654.

4. Regional Haze Rule Revisions

In 2006, the EPA responded to these decisions by revising the Regional Haze Rule, making the evaluation of the final BART factor a source-by-source determination rather than one based on an evaluation of emission reductions in the aggregate. *Final Rule, Regional Haze Regulations; Revisions to Provisions Governing Alternative to Source-Specific BART Determinations*, 71 Fed. Reg. 60,612, 60,612-13 (Oct. 13, 2006). Thus, the participating states had to resubmit implementation plans.

5. Subsequent Implementation Plans Adopting 309 Program

Arizona and Oregon decided not to participate in the 309 program. But New Mexico, Utah, Wyoming, the City of Albuquerque, and Bernalillo County resubmitted plans for a 309 program. In the new plans, the participants adjusted the emission milestones to account for withdrawal of Arizona and **[**12]** Oregon and reductions already achieved under the 2003 milestones. Joint App. at 426, 430-38.

The new implementation plans set the following regional milestones:

- 269,083 tons of sulfur dioxide in 2008,
- 234,903 tons of sulfur dioxide in 2009,
- 200,722 tons of sulfur dioxide in 2010-2012,
- 185,795 tons of sulfur dioxide in 2013,
- 170,868 tons of sulfur dioxide in 2014,
- 155,940 tons of sulfur dioxide in 2015-17, and
- 141,849 tons of sulfur dioxide in 2018 and beyond.

Id. at 461.

When determining whether the 309 program would outperform BART, the participants considered BART-eligible sources and other sources. Because presumptive rates were not established for the other sources, the states analyzed individual sources to determine the emission-rate **[*927]** benchmark for sources that were ineligible under BART. *Id.*

The 309 program set the 2018 milestone to the BART

[7] States opting for a 309 program still had to comply with § 51.308 with respect to any other Federal Class I area not encompassed in the 309 program. 40 C.F.R. § 51.309(a).

benchmark based on the presumptive BART in Appendix Y. But New Mexico, Utah, Wyoming, the City of Albuquerque, and Bernalillo County determined that the 309 program would outperform BART by:

- encouraging early cuts in emissions,
- including non-BART stationary sources, covering 63 more sources that produce emissions,
- capping growth in new sources,
- addressing not only stationary **[**13]** sources but also mobile sources, fire, and clean air corridors (which are not covered by BART), and
- establishing a "mass-based cap," which created an absolute limit on allowable emissions (unaffected by demand fluctuations or operational malfunctions that could increase emissions).

In 2011, New Mexico, Utah, Wyoming, the City of Albuquerque, and Bernalillo County revised their implementation plans adopting the 309 program. In late 2012, the EPA approved the plans, finding that the 309 program would achieve greater reasonable progress than BART. *Id.* at 1-53. The Petitioners challenge the EPA's approval of the 309 program.

II. Standard of Review

The Clean Air Act authorizes judicial review of the EPA's approval of state implementation plans, but does not designate the applicable standard of review. *42 U.S.C. § 7607(b)(1)*. In conducting this review, we are bound by the Administrative Procedure Act. *See Oklahoma v. EPA, 723 F.3d 1201, 1211 (10th Cir. 2013)* ("We follow the standards of the Administrative Procedure Act . . . in reviewing the EPA's actions under the [Clean Air Act].").

Under the Administrative Procedure Act, we can reverse agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *5 U.S.C. § 706(2)(A)*. This standard requires **[**14]** us to determine whether the agency considered the relevant data and rationally explained its decision. *See In re FCC, 753 F.3d 1015, 1041 (10th Cir. 2014)*. Under this standard, we will not disturb an agency action unless the agency

> relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43, 103 S. Ct. 2856, 77 L. Ed. 2d 443 (1983).

If the agency's "'path may reasonably be discerned'" from its explanation, we will not disturb the action even when the explanation is not entirely clear. *Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461, 497, 124 S. Ct. 983, 157 L. Ed. 2d 967 (2004)* (quoting *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc., 419 U.S. 281, 286, 95 S. Ct. 438, 42 L. Ed. 2d 447 (1974)*). When an agency acts under an "'unwieldy and science-driven statutory scheme[] like the Clean Air Act,'" we afford the agency "'particular deference.'" *Nat'l Ass'n of Clean Air Agencies v. EPA, 489 F.3d 1221, 1229, 376 U.S. App. D.C. 385 (D.C. Cir. 2007)* (quoting *Bluewater Network v. EPA, 372 F.3d 404, 410, 362 U.S. App. D.C. 37 (D.C. Cir. 2004)*).

III. The EPA's Approval of the Implementation Plans

The environmental groups argue that:

- **[*928]** the 309 program does not achieve greater reasonable progress than implementation of BART,
- the 309 program will not achieve reasonable progress toward eliminating visibility impairment because only three of the nine eligible states participated, and
- New Mexico's **[**15]** program is deficient based on the failure to analyze emissions from the Escalante coal plant.

We reject each argument.

A. The EPA's Determination that the 309 Program Was Better than BART

The Regional Haze Rule establishes three steps for states to follow when determining whether an alternative program is better than BART:

> (1) establish a BART benchmark and predict emission reductions if BART were implemented;
> (2) predict the emission reductions from an alternative program; and
> (3) compare the two.

40 C.F.R. § 51.308(e)(2).

The environmental groups contend that the EPA acted arbitrarily and capriciously because:

- the BART benchmark improperly adopted the presumptive emission rate established in Appendix Y of the BART guidelines,
- the participants misapplied the "clear weight of the evidence" standard, and
- the participants overstated the effectiveness of the 309 program by inappropriately considering qualitative

factors.

The EPA's approval of the better-than-BART determination was not arbitrary or capricious because:

- the presumptive BART benchmark was appropriate under the Clean Air Act and Regional Haze Rule,
- the Regional Haze Rule allows comparison of BART to the alternative measure through a "clear weight of **[**16]** the evidence" standard, and
- the participants properly considered qualitative factors in determining the effectiveness of the 309 program.

1. BART Benchmark

When approving the implementation plans, the EPA concluded: "The BART benchmark calculation . . . was not intended to assess actual emissions at BART subject sources nor was it intended to assess the control capabilities of later installed controls. Instead, the presumptive [sulfur dioxide] emissions rate served as a necessary simplifying assumption." *Wyoming Rule, 77 Fed. Reg. at 73,929-30*.

The environmental groups challenge this conclusion, arguing that source-specific data showed that actual emissions fell below the BART benchmark. For this argument, the environmental groups rely on a report prepared by their expert witness, Ms. Vicki Stamper. Ms. Stamper concluded that source-by-source BART analyses and actual emissions were lower than the presumptive BART benchmark used to approve the 309 program.

Relying on Ms. Stamper's conclusions, the environmental groups contend that:

- the participants should have conducted a source-by-source BART analysis instead of relying on the presumptive BART benchmark, and
- the BART benchmark was inappropriate.

The first argument is untimely. **[**17]** Under federal law, a petitioner has only 60 days to sue after the agency acts. *42 U.S.C. § 7607(b)(1)*; *see Utah v. EPA, 750 F.3d 1182, 1184 [*929] (10th Cir. 2014)*. The environmental groups failed to comply with this deadline.

The environmental groups' second challenge, involving the validity of the BART benchmark, fails on the merits.

a. The 309 Program's Presumptive BART Benchmark

The first challenge requires an understanding of:

- the regulatory requirements for states to establish the BART benchmark, and
- how the participants used the presumptive BART benchmark in their better-than-BART analyses.

As noted above, participants in the 309 program had to determine the "BART benchmark," which represents the expected emissions under a BART regime. *See 40 C.F.R. § 51.308(e)(2)*.

The BART benchmark is typically set by determining how much sulfur dioxide would be emitted by each BART-regulated source. *See id. § 51.308(e)(2)(i)(C)* ("This analysis must be conducted by making a determination of BART for each source subject to BART and covered by the alternative program as provided for in [the subsection outlining the BART determination].").

But an exception exists when the alternative program is designed to achieve a requirement other than BART, such as the reasonable progress goals. In this situation, a source-by-source **[**18]** BART determination is not necessary to determine the BART benchmark. Instead, the state could determine the BART benchmark "based on both source-specific and category-wide information, as appropriate." *Id.*

The 309 program was designed to implement something other than BART: the recommendations of the Transport Commission toward eradication of regional haze over the Colorado Plateau. Accordingly, the participants did not need to conduct source-by-source BART determinations to establish the BART benchmark. And the participants did not do so.

Instead, the participants relied on the Western Regional Air Partnership's better-than-BART analysis. As the BART benchmark, the Air Partnership determined that "[a]ll utilities that were determined to be subject to BART were assumed to be operating at the presumptive emission rate established in *40 CFR Part 51, Appendix Y* [0.15 pound per million British thermal units]." Joint App. at 435.

The "Appendix Y" presumptive emission rate refers to the EPA's 2005 amendment to the Regional Haze Rule, which added guidelines to instruct states analyzing individual sources under BART. *See 70 Fed. Reg. 39,131*-32; 40 C.F.R. pt. 51, App. Y. In Appendix Y, the EPA established a presumptive BART emission rate of 0.15 pound per million British thermal units **[**19]** for BART-eligible sources.

The Western Regional Air Partnership relied on Appendix Y's presumptive emission rate for all but two BART-eligible sources. For these two sources (the Hunter and Huntington power plant units), a lower BART emission rate of 0.12 pound per million British thermal units was used based on limits already in place. Joint App. at 448.

b. Timeliness

The environmental groups argue that the participants should have set the BART benchmark by predicting emissions for each BART-regulated source (rather than relying on the presumptive rate in Appendix Y). This argument is not timely.

When amending the Regional Haze Rule in 2006, the EPA recognized that "the [Appendix Y] presumptions represent[ed] **[*930]** a reasonable estimate of a stringent case BART." *71 Fed. Reg. at 60,619*. In light of the reasonableness of this estimate, the EPA decided in 2006 that participants could rely on the presumptive rate when attempting to meet a requirement other than BART. By using the presumptive rate, participants could avoid the need to predict emissions for each source under a BART system of regulation. *Id. at 60,618-19*.

The environmental groups argue that the participants should have conducted their own source-specific BART analyses. In the absence of these analyses, **[**20]** the environmental groups contend that the EPA arbitrarily approved use of the presumptive BART benchmark. In effect, this contention challenges the EPA's 2006 amendment establishing use of the presumptive BART benchmark. We can adopt this view only if we conclude that the EPA erred in adopting the Appendix Y BART as a presumptive benchmark.[8]

It is too late for the Petitioners to make this argument. If the environmental groups wished to challenge adoption of Appendix Y as the presumptive BART emission rate, they had to file a petition for review within 60 days of the EPA's publication of the 2006 amendment to the Regional Haze Rule. *See 42 U.S.C. § 7607(b)(1); Utah v. EPA, 750 F.3d 1182, 1184 (10th Cir. 2014)*. That amendment was published in the Federal Register on October 13, 2006, and the petitions for review were not filed until more than six years later (December 2012 and January 2013). *See 71 Fed. Reg. at 60,612*; 40 C.F.R. Pt. 51, App. Y. Accordingly, we lack jurisdiction over a challenge to the EPA regulation authorizing use of Appendix Y in lieu of a source-by-source determination. *See Utah, 750 F.3d at 1184; Utah v. EPA, 765 F.3d 1257, 2014 WL 4345770, at *5 (10th Cir. 2014)*.

c. Actual Emissions Lower than the Presumptive BART Emission Rate

The environmental groups also invoke *§ 51.308(e)(2)(i)(C)*, arguing that the EPA should have considered whether use of category-wide information was "appropriate." Pet'rs' Reply Br. at 26; *see 40 C.F.R. § 51.308(e)(2)(i)(C)*.[9] This argument stems from unreasonable assumptions about the **[*931]** information **[**22]** available to the states when they submitted their plans.

According to the environmental groups, most BART-eligible sources emitted less sulfur dioxide than the presumptive benchmark would allow and the EPA elsewhere projected even lower presumptive emission rates. In the face of this data, the environmental groups argue that *§ 51.308(e)(2)(i)(C)* would prohibit states from relying on Appendix Y's presumptive BART rate.

This argument is based largely on the report of Ms. Stamper, who said that 17 of the BART-eligible sources had emission rates that dipped below the rates allowed in Appendix Y. Reliance on Ms. Stamper's report is misguided. Ms. Stamper relied on contemporaneous measures of emissions post-dating the participants' implementation plans, and the EPA **[**23]** regulations expressly allowed reliance on the presumptive rate.

The Western Regional Air Partnership submitted its better-

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[8] The environmental groups deny that they are asserting a need for a source-by-source BART determination. But in her expert report, Ms. Stamper stated that *§ 51.308(e)(2)(i)(C)* required a source-by-source BART determination. Joint App. at 684. And the environmental groups rely heavily on this report in criticizing the presumptive BART benchmark. Pet'rs' Opening Br. at 34, 41 (arguing that the presumptive BART was "much *less stringent than* source-by-source BART determinations").

In their reply brief, the environmental groups retreat from this argument: "Contrary to EPA's assertions in its answering brief, Petitioners do not contend that states participating in the 309 Program must conduct source-by-source BART determinations based on the methodology in *40 C.F.R. § 51.308(e)(1)* and the BART Guidelines in order to develop a valid BART benchmark." Pet'rs' Reply Br. at 6.

Even if the environmental groups had not retreated **[**21]** from this argument, it would have been untimely. Thus, we need not address the parties' disagreement over Ms. Stamper's opinions on emissions from BART-regulated sources. *See, e.g.*, Industry Intervenors' Response Br. at 34.

[9] The environmental groups argue:

> Petitioners challenge EPA's application of th[e] authorization [to use a simplifying presumption] and interpretation to establish the BART benchmark despite readily available category-wide and source-specific evidence that the presumptive rate is not an "appropriate" simplifying assumption because it grossly underestimates the emission reductions achievable by installing BART at the affected sources.

Pet'rs' Reply Br. at 26.

than-BART determination in October 2010, and the participants relied on this determination in their 2011 implementation plans. Joint App. at 435; *see* *Final Rule, Approval and Promulgation of State Implementation Plans; Wyoming, 77 Fed. Reg. 73,926, 73,926 (Dec. 12, 2012)*; *Final Rule, Approval, Disapproval and Promulgation of State Implementation Plans; Utah, 77 Fed. Reg. 74,355, 74,355 (Dec. 14, 2012)*; *Final Rule, Approval and Promulgation of State Implementation Plans; New Mexico, 77 Fed. Reg. 70,693, 70,693 (Nov. 27, 2012)*; *Final Rule, Approval and Promulgation of State Implementation Plans; City of Albuquerque-Bernalillo County, 77 Fed. Reg. 71,119, 71,119 (Nov. 29, 2012)*.

The environmental groups contend that the participants should have accounted for actual emissions. The EPA could reasonably conclude that inclusion of Ms. Stamper's data would have been infeasible, for the better-than-BART determination resulted from coordinated efforts by the participants over several years[10] and much of the omitted data did not even exist until this process had almost come to an end. Thus, the EPA rejected the environmental groups' insistence that the participants should have incorporated the new data. Joint App. at 30-31. This conclusion was not arbitrary or capricious. *See* *San Luis & Delta-Mendota Water Auth. v. Jewell, 747 F.3d 581, 620-21 (9th Cir. 2014)* (holding that the Fish and Wildlife Service's choice of a baseline, though imperfect, was not arbitrary or capricious because removal of the imperfections would not have been feasible).

Reliance on Ms. Stamper's data was not only infeasible, but also invalid under the EPA regulations. These regulations expressly allowed participants to use the presumptive **[**24]** benchmark to predict emissions instead of assessing how much pollution would be emitted from each source under a BART regime. *71 Fed. Reg. at 60,618-19*. Ms. Stamper's analysis suggests that the presumptive benchmark is overly generous for some sources. But imprecision is inherent in the nature of a simplifying assumption.

In arguing that the EPA disregarded site-specific information, the environmental groups refer to two units (the Hunter Unit 1 and the Dave Johnson Unit 4) and point out that the EPA used actual emissions in the Cross-State Air Pollution Rule. *See* *Final Rule, Regional Haze; Revision to Provisions Governing Alternatives to Source-Specific BART Determinations, 77 Fed. Reg. 33,642, 33,649 (June 7, 2012)*; *Proposed Rule, Regional Haze; Revisions [*932] to Provisions Governing Alternatives to Source-Specific BART Determinations, 76 Fed. Reg. 82,219, 82,225-26 (Dec. 30, 2011)*.

[10] Joint App. at 175, 426.

The EPA's use of actual emissions in one rule does not require the EPA to use actual emissions in every rule. And, the regulations expressly allow participants to use the benchmark in lieu of actual emissions. Thus, the EPA interpreted its Regional Haze Rule and concluded:

- "[T]here is no need to develop a precise estimate of the emissions reductions that could be achieved by BART in order simply to compare two programs," and
- "the [Appendix Y] presumptions represent a reasonable estimate of a stringent case BART."

71 Fed. Reg. at 60,618-19.

This interpretation was reasonable. *Section 51.308* mandates the use of source-specific and category-wide information "as appropriate." *40 C.F.R. § 51.308(e)(2)(i)(C)*. Information may **[**25]** be appropriate in one context, but not another. *Section 51.308* provides flexibility in what may be considered, and the EPA reasonably interpreted that provision.

d. The EPA's Statements Regarding Appendix Y's Presumptive BART

The environmental groups also argue that the presumptive rate (0.15 pound per million British thermal units) is rebuttable and serves only as the starting point of the BART analysis. Pet'rs' Opening Br. at 42. This argument is rejected.

For this argument, the environmental groups refer to other rules in which the EPA has clarified the BART analysis for states and the role of Appendix Y. *Id.* at 43. For example, the environmental groups point to the rejection of Arkansas' implementation plan, where the EPA said that states must "'consider the level of control that [was] currently achievable at the time the BART analysis [was] being conducted.'" *Id.* (quoting *Final Rule; Approval and Promulgation of Implementation Plans; Arkansas, 77 Fed. Reg. 14,604, 14,613-14 (Mar. 12, 2012))*.

This argument overlooks a critical distinction. In the cited instances, the states were conducting a BART analysis. Here, they weren't. Instead, the participants in our case were conducting a better-than-BART determination. This analysis required a comparison of the 309 program to the BART benchmark, which adopted Appendix Y's **[**26]** presumptive BART as a simplifying assumption. The environmental groups have not identified any authority requiring a source-by-source analysis for states conducting a 309 program.

2. Comparison of the 309 Program to BART

At the second and third stages of the better-than-BART analysis, the participant must:

(1) predict the emission reductions achieved by implementing the alternative program (the second stage), and
(2) compare the effectiveness of the alternative measure to the effectiveness of implementing BART (the third stage).

40 C.F.R. § 51.308(e)(2)(i)(D), (E). The environmental groups challenge the EPA's approval at both stages.

At the third stage, the groups claim that the participants used an improper method of comparison. And at the second stage, the groups allege improper reliance on qualitative factors to bolster the effectiveness of the 309 program. Because the applicability of qualitative factors at the second stage depends on the method used at the third stage, we first address whether **[*933]** the participants used the proper method to compare the 309 program to BART.

a. Comparison of the Milestones (in the 309 Program) to BART

The EPA compared the 309 program as a whole to BART. The environmental groups suggest in their **[**27]** reply brief that the EPA should have compared the 309 program milestones (rather than the 309 program as a whole) to the effectiveness of BART. *See 40 C.F.R. § 51.309(d)(4)(i)*. But we cannot entertain this suggestion because it was unexhausted and omitted in the environmental groups' opening brief.

Under the Clean Air Act, "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." *42 U.S.C. § 7607(d)(7)(B)*; *see EPA v. EME Homer City Generation, L.P., U.S. , 134 S. Ct. 1584, 1602, 188 L. Ed. 2d 775 (2014)* (holding that satisfaction of *§ 7607(d)(7)(B)* was mandatory, but not jurisdictional). But the environmental groups failed to raise this issue in the EPA proceedings. That failure renders the claim unexhausted. *See Oklahoma v. EPA, 723 F.3d 1201, 1214-15 (10th Cir. 2013)*.

Even in the present action, the environmental groups did not raise the issue until they filed their reply brief. By then it was too late to raise a new issue. *See M.D. Mark, Inc. v. Kerr-McGee Corp., 565 F.3d 753, 768 n.7 (10th Cir. 2009)* (the "general rule in this circuit is that a party waives issues and arguments raised for the first time in a reply brief").

We decline to entertain this issue, for it was not exhausted or raised in the environmental groups' opening brief.

b. Consideration of Qualitative Factors

The EPA determined that the 309 program as a whole was more effective **[**28]** than a fully implemented BART regime because the 309 program:
(1) included non-BART sources of sulfur-dioxide emissions,
(2) included new sources of emissions,
(3) created a "mass-based" cap covering emissions in the aggregate, and
(4) encouraged early reductions in emissions.
The environmental groups characterize this rationale as qualitative and argue that the EPA should instead have focused solely on quantitative considerations. We reject this argument.

i. Failure to Use *§ 51.308(e)(3)*'s Method

According to the environmental groups, a quantitative approach was required in *40 C.F.R. § 51.308(e)(3)*. Instead of using one of the quantitative methods, the groups continue, the EPA improperly applied a qualitative standard ("clear weight of the evidence").

Section 51.308(e)(2)(i) sets out the process to compare an alternative program to BART. This section did not initially articulate a method for the comparison. The EPA considered a method that would compare the "expected visibility improvement under the alternative program and under BART according to the criteria established in *§ 51.308(e)(3)*." *Proposed Rule, Regional Haze Regulations; Revisions to Provisions Governing Alternative to Source-Specific BART Determinations, 70 Fed. Reg. 44,154, 44,158 (Aug. 1, 2005)*. The EPA also sought comment on: (1) whether *§ 51.308(e)(3)* provided the sole way to demonstrate greater reasonable progress, or (2) whether qualitative factors could be considered. *Id.*

[*934] In **[**29]** 2006, the EPA determined that *§ 51.308(e)(3)* should not serve as the only means to show "greater reasonable progress." Thus, the EPA amended *§ 51.308(e)(2)(i)* to add "*E*," which authorized use of the "clear weight of evidence" standard as a way of showing that the alternative program was better than *BART. Final Rule, Regional Haze Regulations; Revisions to Provisions Governing Alternative to Source-Specific BART Determinations, 71 Fed. Reg. 60,612, 60,622 (Oct. 13, 2006)*. Under *§ 51.308(e)(2)(i)(E)*, the better-than-BART analysis may be made "under paragraph (e)(3) of this section or otherwise based on the clear weight of evidence that the trading program or other alternative measure achieves greater reasonable progress than would be achieved through the installation and operation of BART at the covered sources."

40 C.F.R. § 51.308(e)(2)(i)(E).

Accordingly, the regulation establishes two ways that a state can compare a 309 program to BART. The state can use the two quantitative methods stated in § 51.308(e)(3) or apply a qualitative standard (the clear weight of evidence). *See* 71 Fed. Reg. at 60,622 ("With respect to the use of a 'weight of evidence' approach as an alternative to the methodology of section 51.308(e)(3), we support the use of such a test as an alternative to the methodology set forth in section 51.308(e)(3).").

The participants chose the qualitative standard, which was permissible under the EPA's interpretation of its regulations. *See* Fed. Express Corp. v. Holowecki, 552 U.S. 389, 397, 128 S. Ct. 1147, 170 L. Ed. 2d 10 (2008) ("Just as we defer to an agency's reasonable interpretations of [its authorizing] **[**30]** statute when it issues regulations in the first instance, . . . the agency is entitled to further deference when it adopts a reasonable interpretation of regulations it has put in force." (citation omitted)).

ii. Qualitative v. Quantitative Factors

The environmental groups argue that even if § 51.308(e)(3) did not furnish the exclusive methodology, the participants should not have relied on qualitative factors because:

> (1) the EPA sought comment on, but did not adopt, a "qualitative" means of evaluating whether an alternative program was better than BART, and
> (2) when adding a "clear weight of the evidence" standard, the EPA identified only quantitative emissions and visibility data as appropriate for a better-than-BART determination.

These arguments do not suggest arbitrariness or capriciousness by the EPA. Both arguments depend on the environmental groups' interpretation of the EPA regulations. The EPA expressly concluded that a participant could use the "clear weight of the evidence" standard. When using this standard, however, the EPA sanctioned consideration of "all available information." [11] There was no prohibition **[*935]** against the consideration of qualitative evidence.

It is true that the EPA provided examples that are quantitative. *See* Final Rule, Regional Haze Regulations; Revisions to Provisions Governing Alternative to Source-Specific BART Determinations, 71 Fed. Reg. 60,612, 60,622 (Oct. 13, 2006). But the EPA pointed out that these examples were not exhaustive and that the determination should be based on "all available information and data which can inform a decision while recognizing the relative strengths and weaknesses of that information in arriving at the soundest decision possible." *Id.*

Because this language supports the EPA's interpretation of its regulation, we do not regard the use of qualitative factors as arbitrary or capricious. *See* Fed. Express Corp. v. Holowecki, 552 U.S. 389, 397, 128 S. Ct. 1147, 170 L. Ed. 2d 10 (2008).

c. The Qualitative Factors

The EPA relied on four factors that could be considered "qualitative":

> (1) The trading program included sources not subject to BART regulation;
> (2) the trading program discouraged emissions from new sources more effectively than a BART regime would have done;
>
> (3) the trading program included an aggregate cap on emissions, which would have decreased emissions more effectively than BART; **[**33]** and
> (4) the trading program encouraged earlier reductions than under a BART regime.

Joint App. at 31-32. These considerations provided a

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[11] In its final rule adding the "clear **[**31]** weight of the evidence" standard as one means of determining that an alternative program was better than BART, the EPA clarified:

> "Weight of evidence" demonstrations attempt to *make use of all available information and data which can inform a decision* while recognizing the relative strengths and weaknesses of that information in arriving at the soundest decision possible. Factors which can be used in a weight of evidence determination in this context *may include, but not be limited to*, future projected emissions levels under the program as compared to under BART, future projected visibility conditions under the two scenarios, the geographic distribution of sources likely to reduce or increase emissions under the program as compared to BART sources, monitoring data and emissions inventories, and sensitivity analyses of any models used. This array of information and other relevant data may be of sufficient quality to inform the comparison of visibility impacts between BART and the alternative program. In showing that an alternative program is better than BART and when there is confidence that the difference in visibility impacts between BART and the alternative scenarios are expected **[**32]** to be large enough, a weight of evidence comparison may be warranted in making the comparison. The EPA will carefully consider the evidence before us in evaluating any [state implementation plans] submitted by States employing such an approach. Final Rule, Regional Haze Regulations; Revisions to Provisions Governing Alternative to Source-Specific BART Determinations, 71 Fed. Reg. 60,612, 60,622 (Oct. 13, 2006) (emphases added).

reasonable basis for the EPA's approval of the 309 program.

i. Emission Reductions from Non-BART Sources

In concluding that the 309 program would outperform BART, the EPA relied in part on inclusion of "all sources with emissions greater than 100 tons/year of [sulfur dioxide]." *See id.* at 516. The threshold for regulation under BART would have been much higher. *See* 40 C.F.R. § 51.301 (stating that sources are eligible for BART if they can emit 250 tons of sulfur dioxide per year, were built between 1962 and 1977, and fall within one of the specified source categories).

The environmental groups criticize the EPA for considering potential reductions in emissions involving non-BART sources. The groups argue that rather than consider non-BART sources, the EPA should have confined its analysis to BART-eligible sources.

We disagree. The environmental groups are relying on regulatory language applicable to the first step of the better-than-BART analysis (the determination of the BART benchmark), not the comparison of BART to the alternative program.

[*936] Under 40 C.F.R. § 51.308(e)(2)(i), subsections "A" through "C" outline the requirements **[**34]** to determine the BART benchmark, the first step of the better-than-BART determination. 40 C.F.R. § 51.308(e)(2)(i)(A)-(C). Subsection "D" addresses the second step: "[a]n analysis of the projected emissions reductions achievable through the trading program or other alternative measure." *Id.* § 51.308(e)(2)(i)(D). And, as previously discussed, subsection "E" states how one compares the relative successes of the alternative program and BART, the third and final step in the better-than-BART analysis. *Id.* § 51.308(e)(2)(i)(E) (requiring a comparison of "the trading program or other alternative measure" with BART).

Accordingly, the environmental groups are mistaken. The EPA could reasonably read "D" and "E" to allow comparison of BART to the entirety of the alternative program (including the non-BART-eligible sources). Thus, the EPA acted reasonably when it considered non-BART sources at the second and third steps of the better-than-BART determination.

ii. Emission Reductions from New Sources

The environmental groups also argue that the EPA incorrectly considered emission reductions from new sources. New sources would not be subject to BART because they would have been built after 1977. *See id.* § 51.301. The groups contend that new sources are already subject to regulations **[**35]** that are more effective than a cap on emissions in the 309 program. We reject this contention.

As the environmental groups state, new sources of emissions are independently regulated by the Clean Air Act. 42 U.S.C. §§ 7411, 7475, 7503; *see* United States v. DTE Energy Co., 711 F.3d 643, 644-45 (6th Cir. 2013) ("New Source Review [under the Clean Air Act] forbids the construction of new sources of air pollution without a permit."). Thus, even without the trading program, new sources would need to show that they meet emission standards based on the "best available control technology." 42 U.S.C. § 7475(a)(4). But, the EPA could reasonably conclude that the 309 program would go beyond the existing regulatory process in reducing emissions from new sources.

The environmental groups contend that a cap would prove meaningless by allowing new sources to obtain allocations equaling the maximum emissions already allowed. We disagree.

Under the new-source regulatory scheme, new-source emissions were limited but not capped. The EPA set out to establish a cap through approval of 309 programs. With caps, the EPA expected polluters to adopt voluntary measures to reduce emissions. Joint App. at 431-32, 438. The EPA coupled this strategy with regulation for new sources. *Id.* This two-fold strategy for new sources had a reasonable foundation: **[**36]** The EPA hoped to reduce emissions for new sources by regulating them and encouraging voluntary reductions in emissions. *Id.* at 31-32.

According to the environmental groups, the cap is ineffective because it accommodated construction of all projected new electric generating units proposed, which renders the "cap" on future sources no better than the new-source regulatory scheme. *Id.* at 212, 432. Under the 309 program, however, the 2018 milestone continues as an emission cap for sulfur dioxide until the participants obtain approval of revised implementation plans. Accordingly, any post-2018 growth will be limited unless a revised implementation mandates otherwise. In view of this strategy by the EPA, its consideration of new sources was not arbitrary or capricious.

[*937] iii. "Mass-Based Cap" on Sulfur-Dioxide Emissions

The environmental groups also contend that:

> (1) the EPA improperly relied on the purported benefits of a "mass-based cap" on sulfur-dioxide emissions,
> (2) the mass-based cap cannot outperform BART because the cap assumes that sources were operating at 85% capacity when many of those sources were actually operating at lower capacity,

(3) setting the assumption of capacity so high allows sources to actually **[**37]** increase emissions, and (4) BART would reduce emission rates across all operations even when they are operating at less than full capacity.

The EPA disagreed and had a reasonable foundation for its disagreement. *Id.* at 31-32.

The Western Regional Air Partnership designed the mass-based cap to allow for an increase in operating capacity at existing sources in light of a projected increase in electrical needs. By setting the assumed capacity at 85%, designers of the program established room for sources to adapt to future needs. The EPA approved the mass-based cap only after concluding that a cumulative limit on emissions would be more effective than BART.

It is true that a source's presumptive capacity may be higher than the actual capacity at any given time. But this possibility does not render the EPA action arbitrary or capricious. The participants followed the concept stated by the Western Regional Air Partnership, setting a cap based on projected increases in electrical needs and accommodation of future growth. *Id.* at 32. Based in part on the Air Partnership's analysis, the EPA determined that the 309 program would be better than a BART system of regulation. *Id.* This determination was not arbitrary **[**38]** or capricious.

iv. Early Emission Reductions

In 1996, the Transport Commission recommended that the market trading program "contain specific provisions to encourage and reward early emission reductions, including reductions achieved before 2000." *Id.* at 437 (internal quotation marks omitted). Following this recommendation, the participants provided additional allocations to sources that reduce emissions ahead of schedule.

In its 2010 report, the Western Regional Air Partnership concluded that participants in the trading program had decreased sulfur-dioxide emissions:

- 25% between 1990 and 2000 in the nine states eligible to participate in the 309 program, and
- an additional 31% between 2000 and 2008 in the participating states.

Id. at 438. The Western Regional Air Partnership attributed these reductions to the 2003 implementation plans.

The environmental groups question the connection between the early reductions and the 309 program. But the EPA never attributed the early reductions to the 309 program. Instead, the EPA simply said that it could not discount the possibility of a causal relationship. For example, when approving the 309 program, the EPA stated that it could not "discount that the 2003 309 **[**39]** [state implementation plan] submittal may have already influenced sources to upgrade their plants before any case-by-case BART determination under *Section 51.308* may have required it." *Final Rule, Approval and Promulgation of State Implementation Plans; Wyoming, 77 Fed. Reg. 73,926, 73,930 (Dec. 12, 2012)*.

[*938] In oral argument, the EPA acknowledged that it was aware of the early reductions, but did not explicitly attribute them to the 309 program. Instead, the EPA argued that proof of a causal relationship was unnecessary. Oral Arg. 31:45-35:29. We agree: The EPA was not required to prove a causal relationship between the already-achieved emission reductions and the decade-long progression of the 309 program. Rather, in its better-than-BART determination of the 309 program, the EPA had to predict whether the alternative program would yield greater reductions than a fully-implemented BART regime. *See 40 C.F.R. § 51.308(e)(2)(i)*.

The existing reductions tended to support the soundness of a strategy encouraging early reductions through the 309 program. The EPA had no need to go further by proving actual causation between the strategy and the early reductions. Thus, the EPA did not act arbitrarily or capriciously in considering the early-reduction incentives.

d. Summary

The approval of the participants' better-than-BART determination was not arbitrary **[**40]** or capricious, and we reject the criticism of the EPA's reliance on qualitative factors and application of the "clear weight of the evidence" standard.

B. "Critical Mass" of Participating States in 309 Program

We must also address the soundness of the 309 program based on the number of states and tribes refusing to participate. Six out of the nine eligible states refused to participate, as did every one of the 211 eligible tribes. Joint App. at 426, 652. The environmental groups argue that without greater participation, the 309 program was doomed to fail. The EPA acted reasonably in rejecting this argument.

1. Timeliness

The EPA contends that this challenge was not raised in a timely manner. For this contention, the EPA characterizes the challenge as an attack on the Regional Haze Rule.

We disagree with this characterization. The environmental groups are not questioning the absence of a critical mass requirement in the Regional Haze Rule. Instead, the groups

are contending that the participating states are too few to satisfy the statutory goal of reasonable progress. The groups' contention addresses the EPA's approval, rather than the validity of the Regional Haze Rule. This contention is timely.

2. The Absence [41] of a Statutory or Regulatory Requirement of Minimum Participation**

Though the argument is timely, it is invalid because neither the Clean Air Act nor the EPA regulations require participation by a certain number of states or tribes. *See* 40 C.F.R. § 51.309(a), (e).

Without a statutory or regulatory requirement, the environmental groups rely on the EPA's proposed 2002 rulemaking. There the EPA stated:

> The requirements in 40 CFR 51.309, if revised, will be the product of a substantial effort by many States, Tribes, Federal agencies, and other interested parties, extending over a number of years from the work of the [Grand Canyon Visibility Transport Commission] to that of the [Western Regional Air Partnership]. The EPA recognizes, however, that the States and Tribes do have the option of implementing the regional haze rule under 40 CFR 51.308 rather than 40 CFR 51.309. Because the objective **[*939]** of 40 CFR 51.309 is to provide a regional approach to protecting air quality at the 16 Class I areas on the Colorado Plateau, EPA believes that there must be a "critical mass" of States participating for 40 CFR 51.309 [state implementation plans] to be approvable.

Proposed Rule, Proposed Revisions to Regional Haze Rule to Incorporate Sulfur Dioxide Milestones and Backstop Emissions Trading Program, 67 Fed. Reg. 30,418, 30,420 (May 6, 2002); *see also* *Final Rule, Revisions to Regional Haze Rule to Incorporate Sulfur Dioxide Milestones and Backstop Emissions Trading Program, 68 Fed. Reg. 33,764, 33,770 (June 5, 2003)* ("The EPA continues to believe, as discussed in the proposal, that judgments on the issue of 'critical mass' are best **[**42]** left to the [Western Regional Air Partnership].").

Later in this proposed revision, however, the EPA indicated that it would "defer to the [Western Regional Air Partnership's] judgment on the issue of 'critical mass,' and . . . request[ed] comment on this proposal." *67 Fed. Reg. at 30,427*. And the Western Regional Air Partnership did not require participation by a minimum number of states or tribes. *See* Joint App. at 174-267. [12] Accordingly, the EPA did not impose such a requirement. *See* 77 Fed. Reg. at 24,769-70 ("*Section 51.309* does not require the participation of a certain number of States to validate its effectiveness.").

3. The Environmental Groups' Arguments on the Soundness of the EPA's Conclusion

The environmental groups argue that not enough states are participating to allow reasonable progress because:

- the three states participating in the 309 program contribute only a small percentage of the sulfur dioxide in Utah's Class I areas and the Colorado Plateau, and
- sources in the three participating states could shift emissions to unregulated sources.

The arguments do not render the EPA's determination arbitrary or capricious because states remain regulated under BART when they decline to participate in the 309 program. With continued regulation under BART, the EPA reasonably concluded that the 309 program could work effectively even without participation from heavy polluters. Joint App. at 29-30.

The environmental groups challenge the factual basis **[**44]** for this conclusion because:

- the 3 states generating the greatest emissions (Nevada, California, and Arizona) chose not to participate,
- the 309 program excludes dozens of coal-fired power plants,
- the 309 program encompasses only 15 coal-fired power plants, and
- **[*940]** the participating states contribute only 36% of the sulfur-dioxide emissions over the Colorado Plateau.

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[12] Instead, the Air Partnership proposed further study on the number and diversity of sources needed to make the program viable:

> The Annex has been developed based on the Grand Canyon Visibility Transport Commission recommendations, which assumed that all of the states and tribes in the transport region would participate in the program. The regional haze rule establishes two paths for states: implement the Commission recommendations, including the backstop trading program under *§51.309*; or develop an independent plan under *§51.308*. An important issue still to be addressed is the effect on the trading program if one or more states and tribes do not choose to participate. Will **[**43]** there be enough sources or enough diversity in the program to create a viable market? Will the administrative costs of the program be justifiable with a smaller group of states and tribes? To address these questions, the [Western Regional Air Partnership] needs to evaluate the economics of the program, and determine the critical mass that is needed to create a viable program.

Joint App. at 234.

These factual arguments do not undermine the reasonableness of the EPA's prediction. Notwithstanding exclusion of many heavy polluters, the EPA legitimately predicted that the 309 program would make "reasonable progress" toward improvement of visibility over the Colorado Plateau. *Id.* The excluded sources would still be regulated, though not under the 309 program.

The environmental groups counter that:

- the exclusions prevent the 309 program from qualifying as a "regional" program, and
- the existence of a regional program is necessary for the EPA to satisfy the statutory and regulatory purposes.

Pet'rs' Reply Br. at 46-47 (citing 42 U.S.C. § 7492(c)). We disagree.

Section 7492 states that "[w]henever . . . the current or projected interstate transport of air pollutants from *one or more States* contributes significantly to visibility impairment in class I areas located **[**45]** in the affected States, the Administrator may establish a transport region for such pollutants that includes such States." 42 U.S.C. § 7492(c)(1) (emphasis added). Accordingly, the statutory authorization of regional programs does not require a minimum number of participating states. *See id.*

The environmental groups also assert that exclusion of major coal-fired power plants from the nonparticipating states would lead sources in the three participating states to shift emissions to unregulated sources. Pet'rs' Opening Br. at 51. To illustrate this assertion, the environmental groups refer to power plants owned by PacifiCorp. PacifiCorp could shift emissions from power plants in Wyoming and Utah (states participating in the 309 program) to power plants in Arizona and Colorado (nonparticipating states). This shift would allow PacifiCorp to comply with the milestones established in the 309 program while increasing emissions in the nonparticipating states. According to the environmental groups, this shift would impede the overall reduction of emissions in the region and could even worsen visibility.

As support, the environmental groups cite the EPA's statements in the Clean Air Interstate Rule:

> Inclusion of all **[**46]** units substantially in the electricity sales business minimizes the potential for shifting utilization, and emissions, *from regulated to unregulated* units in that business and thereby freeing up allowances, with the result that total emissions from generation of electricity for sale exceed the [Clean Air Interstate Rule] emissions caps. The fact that units in the electricity sales business are generally interconnected through their access to the grid significantly increases the potential for utilization shifting.

Final Rule, Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule), 70 Fed. Reg. 25,162, 25,277 (May 12, 2005) (emphasis added).[13]

[*941] The environmental groups overlook a vital distinction: Even when a state does not participate in the 309 program, it must comply with § 51.308. Accordingly, approval was not arbitrary or capricious based on the refusal of 6 states and 211 tribes to participate.

4. Inconsistency and a Lack of Explanation

The environmental groups argue that the EPA changed its position regarding the "critical mass" of participating states without sufficient explanation. *See* Pet'rs' Opening Br. at 53. We reject this argument.

An unexplained deviation from past practice can render an agency's decision arbitrary and capricious, but inconsistency with past practice "is not a basis for declining to analyze the agency's interpretation[s]." Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 981, 125 S. Ct. 2688, 162 L. Ed. 2d 820 (2005). "[I]f the agency adequately explains the reasons for a reversal of policy, 'change is not invalidating.'" *Id.* (quoting Smiley v. Citibank (S.D.), N.A., 517 U.S. 735, 742, 116 S. Ct. 1730, 135 L. Ed. 2d 25 (1996)).

The EPA never stated, one way or the other, whether a critical mass of participating states was necessary **[**48]** for the success of a 309 program. Instead, the EPA explicitly deferred to the judgment of the Western Regional Air Partnership, which did not make a recommendation on whether to require a minimum number of states. *See* 67 Fed.

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[13] The D.C. Circuit Court of Appeals struck down the Clean Air Interstate Rule, reasoning that it violated the statutory prohibition against contribution of pollution in downwind states from sources within the upwind states. North Carolina v. EPA, 531 F.3d 896, 908, 382 U.S. App. D.C. 167 (D.C. Cir. 2008); *see* North Carolina v. EPA, 550 F.3d 1176, 1178, 384 U.S. App. D.C. 70 (D.C. Cir. 2008) (en banc) (deciding to leave the Clean Air Interstate Rule in place until the EPA could promulgate additional regulations). The D.C. Circuit Court of Appeals reached this conclusion because the cap-and-trade program in the Clean Air Interstate Rule would not "assure that upwind states will abate their unlawful emissions as required by section 110(a)(2)(D)(i)(I)." North Carolina, 531 F.3d at 906. Essentially, the D.C. Circuit Court of Appeals agreed that upwind states participating in the **[**47]** regional trading program could trade emissions with other states to avoid the statutory duty to reduce emissions. *Id.* Here, however, the environmental groups do not assert that shifting of emissions between sources would allow the participating states to avoid their statutory duties.

Reg. at 30,427; Joint App. at 174-267. Because the EPA did not render an opinion on the critical-mass requirement, its approval of the 309 program was not arbitrary and capricious based on an alleged inconsistency with prior policy.

C. Emissions from the Escalante Coal Plant in New Mexico's Implementation Plan

The environmental groups also challenge the EPA's approval of New Mexico's implementation plan in areas beyond the Class I areas subject to the 309 program. In this challenge, the groups argue that the EPA did not account for emissions from the state's second-largest non-BART coal plant, the Escalante coal plant. 42 U.S.C. § 7491(b)(2)(B); 40 C.F.R. § 51.308(d)(1), (3). We reject this argument.

1. Background

The environmental groups' argument requires examination of the regulatory and factual setting for New Mexico's implementation plan.

a. Reasonable Progress Goals in § 51.308(d)(1)

The regulations require states to establish reasonable progress goals through deciviews that would: (1) improve visibility during the most impaired days, and (2) ensure no degradation in **[**49]** visibility on the least impaired days. 40 C.F.R. § 51.308(d)(1). The related analysis involves two steps.

In the first step, states consider four factors:

(1) the cost of compliance;
(2) the time necessary for compliance;

[*942] (3) the energy and non-air quality environmental impacts of compliance; and
(4) the remaining useful life of any potentially affected sources.

Id. § 51.308(d)(1)(i)(A).

In the second step, states determine the rate of required progress by comparing the baseline visibility conditions to natural visibility conditions that are expected by 2064. *Id.* § 51.308(d)(1)(i)(B). In this step, the state considers:

- what progress is needed to obtain natural visibility conditions by 2064, and
- what would be needed for the duration of the implementation plan.

Id.

If the state determines that it cannot reach the uniform rate of progress, it must demonstrate that a slower rate of progress is reasonable and that the greater rate of progress is unreasonable. *Id.* § 51.308(d)(1)(ii).

b. New Mexico's Reasonable Progress Goals

In its plan, New Mexico applied the four-factor analysis and determined that the uniform rate of progress would not be reasonably achievable. *Final Rule, Approval and Promulgation of State Implementation Plans; New Mexico, 77 Fed. Reg. 70,693, 70,701-02 (Nov. 27, 2012).* This determination required the state to demonstrate that its slower rate of progress would be reasonable under **[**50]** the four-factor analysis articulated in § 51.308(d)(1)(i)(A). New Mexico complied with this requirement in part based on the Western Regional Air Partnership's analysis.

At New Mexico's request, the Western Regional Air Partnership conducted an additional source-specific analysis of three petroleum refineries in New Mexico. Joint App. at 411. New Mexico used this source-specific analysis to argue that it could not achieve natural visibility conditions by 2064. *Id.* at 564. To defend its less ambitious goal, New Mexico pointed to natural causes of pollution (such as local wildfires) and predicted improvement in visibility during the most impaired days and preservation of existing visibility on the best days. *Id.* at 563-64.

This reasoning prompted criticism. In response, New Mexico said it would "examine and consider implementing additional emission reductions in the [state implementation plan] analysis for 2013." *Id.* at 508. As promised, New Mexico analyzed emissions from additional power plants. *Id.*

c. The Escalante Coal Plant

Though New Mexico expanded its analysis, it did not examine emissions at the Escalante Coal Plant. That omission gives rise to the present challenge.

The Escalante Coal Plant is a 250-megawatt coal-fired power plant outside of Albuquerque, New **[**51]** Mexico. The environmental groups allege that the omission proves fatal because this plant "emits thousands of tons per year of haze-causing nitrogen oxides and is located within 200 miles of at least 5 of New Mexico's Class I areas located outside of the Colorado Plateau." Pet'rs' Opening Br. at 57. The EPA counters that the Escalante plant's emissions are far lower than the emissions from the only BART source in New Mexico (the San Juan Generating Station). Resp.'s Br. at 54 n.13.

2. Waiver

The EPA contends that the environmental groups did not

exhaust this allegation because they did not cite § 51.308(d)(1), (3) or urge the need for **[*943]** analysis of the Escalante plant. Resp.'s Br. at 53-54. We disagree.

In comments to the EPA, the environmental groups asserted:

> EPA's proposal relies on the [Western Regional Air Partnership's] general, non-source specific analysis of potential reasonable progress source categories. *See*, Docket EPA-R06-2009-0050-0014, Appendix E. The [Western Regional Air Partnership's] general source category analysis fails to identify any specific New Mexico sources that may be subject to reasonable progress controls. *Id.* The [Western Regional Air Partnership's] general source analysis is **[**52]** also factually incorrect. Table 6-1 of the [Western Regional Air Partnership's] analysis indicates that there is ***no*** [particulate matter, sulfur dioxide, or nitrogen oxide] emissions from coal fired boilers in New Mexico. *Id.* at p. 340. To the contrary, coal fired boilers at SJGS, Escalante coal plant, Raton coal plant, and Four Corners all emit significant quantities of these criteria pollutants. Thus, reliance on the [Western Regional Air Partnership] general source report for approval of the New Mexico [state implementation plan] is arbitrary and capricious due to its factual inaccuracy.

Joint App. at 753.

This comment put the EPA on notice of the current argument regarding the Escalante plant. As the EPA points out, the environmental groups did not argue that New Mexico was required to analyze the Escalante plant. But the comment alerted the EPA to the issue. *See* S. Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882, 891, 374 U.S. App. D.C. 121 (D.C. Cir. 2006) ("[C]ommenters must be given some leeway in developing their argument before this court, so long as the comment to the agency was adequate notification of the general substance of the complaint."). The commenter was alleging a need to address emissions from all industrial sources in New Mexico, including the Escalante plant.

The groups' failure to cite § 51.308(d)(1), (3) is not **[**53]** fatal. The environmental groups discussed the reasonable progress goal, and this discussion provided "'adequate notification of the general substance of the complaint.'" Natural Res. Def. Council v. EPA, 571 F.3d 1245, 1259, 387 U.S. App. D.C. 162 (D.C. Cir. 2009) (quoting S. Coast Air Quality Mgmt. Dist., 472 F.3d at 891).

3. Consideration of the Escalante Plant

Citing 40 C.F.R. § 51.308(d)(3)(iv), the environmental groups contend that New Mexico's reasonable-progress analysis should have included an analysis of the Escalante plant[14] instead of relying solely on: (1) the Western Regional Air Partnership's general, non-source specific analysis of potential controls for eight source categories, which did not include the Escalante **[*944]** plant, and (2) source-specific analyses for three New Mexico petroleum refineries.

The environmental groups contend that New Mexico had "to undertake a 'source-specific' analysis to determine whether to require measures, such as installation of new air pollution control technology, to achieve the reasonable progress goals." Pet'rs' Opening Br. at 55. In support, the groups cite § 51.308(d)(1)(i)(A), the subsection outlining the four factors to be considered in the reasonable-progress analysis. *See* 40 C.F.R. § 51.308(d)(1)(i)(A). As the EPA points out, however, this subsection does not require a source-specific analysis.

Rather, the "source-specific" language originates in § 51.308(e)(2)(i)(C), which discusses the better-than-BART analysis. *See* 40 C.F.R. § 51.308(e)(2)(i)(C). This subsection is distinct from the four factors in § 51.308(d)(1) that govern the determination of reasonable progress. Accordingly, we reject the environmental groups' argument that the EPA had to engage in a source-specific analysis for a reasonable-progress determination. Nothing in the Regional Haze Rule **[**55]** or the Clean Air Act required New Mexico to conduct a four-factor analysis of the Escalante plant.

Two parts of the Regional Haze Rule allowed New Mexico to rely on the Western Regional Air Partnership's four-factor analysis. First, § 51.308(d)(3)(iii) permits a state conducting a reasonable-progress determination to "rely[] on technical analyses developed by the regional planning organization." 40 C.F.R. § 51.308(d)(3)(iii). Second, § 51.309 allows states to base determinations of reasonable progress "on assessments conducted by the States and/or a regional planning body." *Id.*

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[14] In their opening brief, the environmental groups make a source-specific argument regarding the Escalante plant. *See, e.g.*, Pet'rs' Opening Br. at 54 ("EPA's approval of the New Mexico [state implementation plan] also was arbitrary because New Mexico failed to evaluate whether emissions reductions from the Escalante coal plant were necessary to achieve reasonable progress."). In their reply brief, however, the groups attempt to expand their argument, stating that New Mexico failed to properly consider all electric generating units (as a category) for **[**54]** non-309 program Class I areas. *See, e.g.*, Pet'rs' Reply Br. at 56. This source-category argument was not raised in the environmental groups' opening brief; thus, we will not consider this argument. *See* Silverton Snowmobile Club v. U.S. Forest Serv., 433 F.3d 772, 783 (10th Cir. 2006) ("[W]e have held that '[t]he failure to raise an issue in an opening brief waives that issue.'" (quoting Anderson v. U.S. Dep't of Labor, 422 F.3d 1155, 1174 (10th Cir. 2005))).

§ 51.309(g)(1). Under both subsections, New Mexico could base their determination of reasonable progress on the Western Regional Air Partnership's assessments.

Neither the Clean Air Act nor the Regional Haze Rule requires source-specific analysis in the determination of reasonable progress. Thus, the EPA's approval of New Mexico's plan was not rendered arbitrary or capricious based on the alleged failure to conduct a four-factor analysis of the Escalante coal plant.

IV. Conclusion

The EPA did not act arbitrarily or capriciously when it approved the participants' implementation plans. Thus, we deny the petitions for review.

End of Document

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]
From: Graham, Cheryl
Sent: Wed 9/20/2017 11:27:55 AM
Subject: Deadline Summaries for Front Office Weekly Report
Front Office Wednesday Weekly Report.docx

Attached are the deadlines from the reg agenda for the Front Office Weekly Report covering 09/20/17 – 10/06/17. Please update by 1:00 today. Thanks

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: OGC ARLO[OGC_ARLO@epa.gov]
From: Graham, Cheryl
Sent: Thur 10/5/2017 5:36:58 PM
Subject: 10/10/17 Reg Review Agenda Updates
17-10-09 agenda.docx

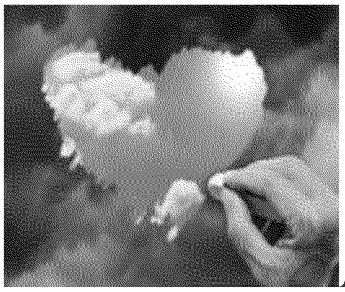
Attached is the redline/strikeout version of the reg agenda, if you have any additions/deletions please let me know by 11:00am Tuesday. Reg Review has been rescheduled for Thursday (10/12) at 4:00pm in room 4045.

Thank you

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Allnutt, David[Allnutt.David@epa.gov]; Anderson, Lea[anderson.lea@epa.gov]; Anderson, Steve[Anderson.Steve@epa.gov]; Aranda, Amber[aranda.amber@epa.gov]; Averback, Jonathan[Averback.Jonathan@epa.gov]; Belser, Evan[Belser.Evan@epa.gov]; Bianco, Karen[Bianco.Karen@epa.gov]; Branning, Amy[Branning.Amy@epa.gov]; Bunker, Byron[bunker.byron@epa.gov]; Chapman, Apple[Chapman.Apple@epa.gov]; Cozad, David[Cozad.David@epa.gov]; Crum, Lynda[Crum.Lynda@epa.gov]; Crystal, Roy[crystal.roy@epa.gov]; Davis, Julian[davis.julian@epa.gov]; Dickinson, David[Dickinson.David@epa.gov]; Dierker, Carl[Dierker.Carl@epa.gov]; Dolph, Becky[Dolph.Becky@epa.gov]; Doster, Brian[Doster.Brian@epa.gov]; Dubey, Susmita[dubey.susmita@epa.gov]; Dubois, Roland[Dubois.Roland@epa.gov]; Frey, Bert[frey.bertram@epa.gov]; Froikin, Sara[Froikin.Sara@epa.gov]; Graham, Cheryl[Graham.Cheryl@epa.gov]; Harrison, Ben[Harrison.Ben@epa.gov]; Hoffman, Howard[hoffman.howard@epa.gov]; Hogan, Stephanie[Hogan.Stephanie@epa.gov]; Holmes, Carol[Holmes.Carol@epa.gov]; Igoe, Sheila[Igoe.Sheila@epa.gov]; Jordan, Scott[Jordan.Scott@epa.gov]; Kaplan, Robert[kaplan.robert@epa.gov]; Kataoka, Mark[Kataoka.Mark@epa.gov]; Klepp, Robert[Klepp.Robert@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Lovett, Lauren[Lovett.Lauren@epa.gov]; Mackey, Cyndy[Mackey.Cyndy@epa.gov]; Manners, Mary[manners.mary@epa.gov]; Marks, Matthew[Marks.Matthew@epa.gov]; Matthews, Julie[Matthews.Juliane@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Mclean, Kevin[Mclean.Kevin@epa.gov]; Morgan, Jeanette[Morgan.Jeanette@epa.gov]; Muller, Sheldon[Muller.Sheldon@epa.gov]; Nguyen, Quoc[Nguyen.Quoc@epa.gov]; Adair, Jocelyn[Adair.Jocelyn@epa.gov]; Odendahl, Steve[Odendahl.Steve@epa.gov]; Okoye, Winifred[Okoye.Winifred@epa.gov]; Orlin, David[Orlin.David@epa.gov]; Pastorkovich, Anne-Marie[Pastorkovich.Anne-Marie@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Rowland, John[Rowland.John@epa.gov]; Schaaf, Eric[Schaaf.Eric@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]; Senn, John[Senn.John@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Snyder, Doug[Snyder.Doug@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Stahle, Susan[Stahle.Susan@epa.gov]; Starfield, Lawrence[Starfield.Lawrence@epa.gov]; Stern, Allyn[Stern.Allyn@epa.gov]; Thrift, Mike[thrift.mike@epa.gov]; Tierney, Jan[tierney.jan@epa.gov]; Ting, Kaytrue[Ting.Kaytrue@epa.gov]; Tsirigotis, Peter[Tsirigotis.Peter@epa.gov]; Versace, Paul[Versace.Paul@epa.gov]; Vetter, Rick[Vetter.Rick@epa.gov]; Werner, Jacqueline[Werner.Jacqueline@epa.gov]; Wilcox, Geoffrey[wilcox.geoffrey@epa.gov]; Williams, Melina[Williams.Melina@epa.gov]; Williamson, Timothy[Williamson.Tim@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Wills, Jennifer[Wills.Jennifer@epa.gov]; Blake, Wendy[Blake.Wendy@epa.gov]; Schramm, Daniel[Schramm.Daniel@epa.gov]; Vergeront, Julie[Vergeront.Julie@epa.gov]; Tozzi, Lauren[Tozzi.Lauren@epa.gov]; Pilchen, Zach[Pilchen.Zach@epa.gov]; Skinner-Thompson, Jonathan[Skinner-Thompson.Jonathan@epa.gov]; Vijayan, Abi[Vijayan.Abi@epa.gov]; Caballero, Kathryn[Caballero.Kathryn@epa.gov]; Thompson, Christopher[Thompson.Christopher@epa.gov]; Williams, Christopher[Williams.Christopher@epa.gov]; Michaels, Lauren[Michaels.Lauren@epa.gov]; Nguyen, DucH[Nguyen.DucH@epa.gov]; Jordan, Deborah[Jordan.Deborah@epa.gov]; Charlton, Tom[Charlton.Tom@epa.gov]; Kulschinsky, Edward[Kulschinsky.Edward@epa.gov]; Portmess, Jessica[Portmess.Jessica@epa.gov]; Kryman, Matthew[Kryman.Matthew@epa.gov]; Greenglass, Nora[Greenglass.Nora@epa.gov]; Spina, Providence[Spina.Providence@epa.gov]; Palmer, Karen[Palmer.Karen@epa.gov]; Seidman, Emily[seidman.emily@epa.gov]; Conrad, Daniel[conrad.daniel@epa.gov]; OGC FEAT[OGC_FEAT@epa.gov]; Hindin, David[Hindin.David@epa.gov]; Sullivan, Tim[Sullivan.Tim@epa.gov]; Carrillo, Andrea[Carrillo.Andrea@epa.gov]; Krallman, John[krallman.john@epa.gov]; Mastro, Donna[Mastro.Donna@epa.gov]; Kane, Eleanor[kane.eleanor@epa.gov]; Ng, Brian[Ng.Brian@epa.gov]; Li, Ryland (Shengzhi)[Li.Ryland@epa.gov]; Spiegelman, Nina[Spiegelman.Nina@epa.gov]; Kodish, Jeff[Kodish.Jeff@epa.gov]; Dugan, Brett[Dugan.Brett@epa.gov]; Yap, Jacqueline[yap.jacqueline@epa.gov]; Pierce, Alexandria[pierce.alexandria@epa.gov]; Traylor, Patrick[traylor.patrick@epa.gov]; Buchsbaum, Seth[buchsbaum.seth@epa.gov]; Iddings, Brianna[Iddings.Brianna@epa.gov]; Knapp, Kristien[Knapp.Kristien@epa.gov]
From: OGCLibrary
Sent: Wed 10/4/2017 4:26:49 PM

Subject: Air & Radiation Law News for October 4, 2017



Air & Radiation Law News

for October 4, 2017

Bloomberg BNA Daily Environment Report™

Leading the News

Air Pollution

EPA Opts for Pollution Trading Over Emissions Controls in Texas

Eight Texas coal-fired power plants can join an air pollution trading program instead of installing expensive new sulfur dioxide controls, the EPA said as part of a rule aimed to improve visibility in the state.

Climate Regulation

Utilities Coalesce Around Plan for New Carbon Dioxide Standards

Ameren Corp. and Entergy are among the utilities urging the EPA to rewrite its carbon dioxide pollution standards for power plants rather than scrapping the rule outright as the Trump administration repeatedly has suggested.

Energy

Energy Grid Rule Moving Fast, Despite Industry Pushback

A proposal that could prop up failing coal and nuclear plants was put on fast forward by the Federal Energy Regulatory Commission, despite concerns among renewable energy, natural gas and oil trade industries that it will greatly distort the wholesale energy markets.

News

Air Pollution
Correction
A Sept. 29 story, “EPA Silent as Ozone Decision Deadline Looms, States Say,” incorrectly said that states submitted their ozone control plans to the EPA along with their recommendations for ozone nonattainment areas. Those plans are due in 2020-2021. The online version has been corrected.

Air Pollution
Missed Ozone Deadline Draws Threat of Lawsuit Against EPA
Environmental groups notified the EPA Oct. 3 that they would sue over a missed deadline for the agency to decide which areas in the U.S. exceed updated ground-level ozone standards set in 2015.

Climate Policy
Fortum's Bid for Uniper Stake Seen Spurred by Carbon Reform
Fortum Oyj's bid for a stake in German utility Uniper SE is partly a bet that the European Union will finally succeed in fixing its environmental policy.

Climate Policy
New York City Climate Plan Calls for Efficient Buildings, Electric Cars
New building standards and more electric vehicle fast chargers are part of New York City's new three-year plan to meet Paris Agreement greenhouse gas reductions—even if the country as a whole does not.

Mining
Backers of Good Samaritan Coal Mine Cleanup Bill Look to Senate
A group of conservationists and coal-state lawmakers is hoping for Senate passage for a bill that would let “good Samaritans” clean up old mine sites without fear of legal liability.

Mining
Peru's Dream of Usurping Copper King Chile Faces Roadblocks
The biggest obstacle to Peru's dream of some day supplanting Chile as the world's biggest copper producer may be Peru itself.

Mining
Trump's EPA Asks Drillers, Miners for Advice on Regulating Them
President Donald Trump's Environmental Protection Agency is asking miners, oil drillers and manufacturers to collaborate with the government on how to regulate their industries.

Natural Gas
These Suburbanites May Have No Fracking Choice
When Bill Young peers out the window of his $700,000 home in Broomfield, Colo., he drinks in a panoramic view of the Rocky Mountains. Starting next year, he may also glimpse one of the 99 drilling rigs that Extraction Oil & Gas Inc. wants to use to get at the oil beneath his home.

Oil & Gas
Left Behind by the Shale Boom, Oklahoma Oilmen Fight to Survive
Not every oilman is gaining from the U.S. shale boom. Just ask Joe Warren.

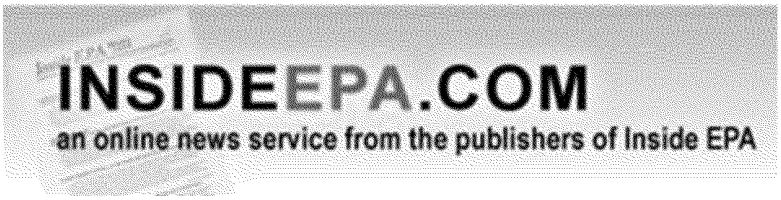
Regulatory Policy
Deregulation Spurs GDP Growth, White House Economists Say
Deregulation will stimulate the growth of gross domestic product in the U.S., the White House Council of Economic Advisers concluded in a report released Oct. 2, though several public-interest groups are dubious.

Renewable Energy
Trump Isn't Acting on Verbal Attacks Against Wind, Dong Says
President Donald Trump's threats against wind energy have so far proven empty, according to an industry giant that expects to grow in the U.S.

Trade Policy
Suniva Seeks 'Buy American' Mandate for Federal Solar Purchases
The U.S. government should purchase power from only American-made solar panels at military bases or in other projects, solar manufacturer Suniva Inc. told a trade panel, adding a new wrinkle to its bid for protection from imports.

Practitioner Insights

Energy
Practitioner Insights: Leading by Example—Energy Reporting in Italy
The European Commission's 2012 Energy Efficiency Directive failed to deliver on its bold vision. This is evident even as its 2020 due date remains more than two years away.



TRUMP'S EPA: Agency at a crossroads -- Complete coverage

Inside EPA's **Clean Air Report,** 10/05/2017

https://insideepa.com/newsletters/clean-air-report

Latest News

Coal Firms Seek High Court Review Of Suit Over Air Law 'Jobs' Evaluations

Coal firms are asking the Supreme Court to reinstate a district court's mandate for EPA to evaluate the employment effects of Obama-era Clean Air Act policies on the energy sector and other industries, saying an appellate ruling that overturned the lower court's decision creates a "blind spot" in judicial review of agency duties.

CBD Cites Pending EPA Ozone Designations To Halt Oil, Gas Lease Sale

In an early sign of the effects of EPA's pending ozone designations, environmentalists are protesting a massive planned Bureau of Land Management (BLM) oil and gas lease sale slated for Utah in December, alleging in part that the bureau failed to analyze the emissions impact of the leasing on EPA's expected nonattainment designation for the area.

Democrats Vow To Block EPA Toxics Office Nominee Despite Senate Rules

Sens. Tom Udall (D-NM) and Richard Blumenthal (D-CT) are joining environmentalists' efforts to block confirmation of Michael Dourson, President Donald Trump's nominee to head EPA's toxics office, an

effort that faces a high bar given current Senate rules, though they are sidestepping questions of what commitments they may seek from the nominee.

House, Senate Lawmakers Probe Air Quality Impacts Of Increased Wildfires

House and Senate lawmakers are probing the air quality and greenhouse gas impacts of increased catastrophic wildfires, while states affected by one of the worst recent wildfire seasons will test the scope of EPA's "exceptional events" policy that provides Clean Air Act exemptions for air pollution associated with natural disasters.

Daily Feed

EPA seeks to postpone argument in brick MACT suit

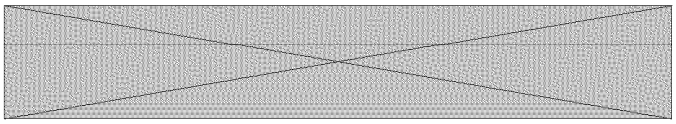
The Trump administration says it wants to delay the argument to weigh possible changes to the contested Obama EPA brick sector air toxics rule.

Senate panel weights boost to federal buyout incentive

The bill seeks to boost maximum VSIP payments from $25,000 to $40,000.

CPP compliance costs lower than expected, study finds

The study comes as the Trump administration is expected to soon release its proposal to repeal the Obama-era greenhouse gas rule for power plants.

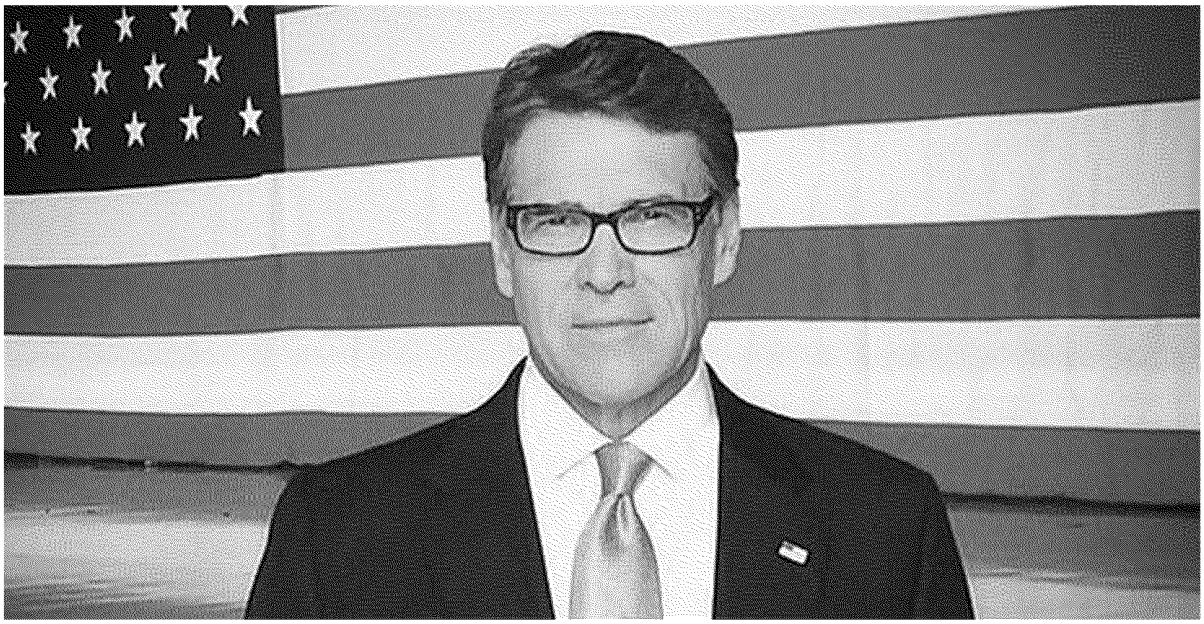


DOE

Meet 'the Texans' in Perry's growing inner circle

Hannah Northey, E&E News reporter

Published: Tuesday, October 3, 2017



Energy Secretary Rick Perry is slowly growing his inner circle of former aides and staffers despite looming vacancies at the agency. @GovernorPerry/Twitter

Energy Secretary Rick Perry's network of political staffers and advisers is growing in the Department of Energy and the Beltway.

The Lone Star State's longest-serving governor is bringing more former staffers to DOE, which is already a magnet for Texans given their home state's massive oil and gas industry and burgeoning wind sector.

DOE career staffers call them, simply, "the Texans."

Michelle Sneed. Sneed/LinkedIn

Among the newest additions is Michelle Sneed, Perry's wife Anita's former chief of staff and the wife of John Sneed, appointed by President Trump to lead DOE's loan guarantee program. Sneed, who worked for Anita Perry for nine years in Austin, is now a deputy director in the secretary's office, according to the department's internal registry and a Freedom of Information request.

John Sneed, who's known Perry for more than a decade, formerly served as the executive director of the Texas State Preservation Board, which oversees the Texas Capitol grounds, governor's mansion, state history museum and state cemetery (*Greenwire*, May 25).

Second in command at DOE is Dan Brouillette, a senior executive at the Texas-based financial services company United Services Automobile Association (USAA). And Dan Wilmot, who worked on Perry's past presidential bids and held a number of posts within Perry's administration when he was governor of Texas, is now deputy chief of staff.

Other DOE officials with Texas connections: Stan Gerdes, a director of scheduling and advance who worked for Perry on his political campaigns and in the governor's office, according to his online bio; Minnie Salinas, a longtime adviser to Anita Perry, now working as an "executive support specialist" at the department; and Bob Haus, who served as Perry's top political strategist in Iowa and is now in DOE's Office of Public Affairs.

There's also Morgan Luttrell, a former Navy SEAL who stood beside Perry as he made his pitch for the White House in years past. Luttrell is now a senior adviser on veterans relations at DOE's Office of Environment, Health, Safety and Security (*E&E News PM*, July 26).

The hires make sense to energy lobbyists who say Texans have an obvious affinity for DOE given their state's massive foothold in the energy world.

"The Texans love DOE," said one lobbyist. "Defense, State, Ag, HHS [Health and Human Services], you can't find another agency that focuses on one state like this."

When asked whether 67-year-old Perry was using his clout to pave the way for political action beyond DOE, former aides and lobbyists said they thought the department represented the former governor's retirement gig, not a stepping stone.

K Street

Even so, Perry's presence in the Trump Cabinet is helping his old associates who aren't at DOE.

Jeff Miller, who managed Perry's 2016 run for the Republican presidential nomination, is now signing up energy clients with business before DOE and the Federal Energy Regulatory Commission for his firm, Miller Strategies LLC.

A fundraiser who used to advise former California Republican Gov. Arnold Schwarzenegger, Miller was described in a 2014 *Texas Tribune* article as "having Perry's ear."

Miller's clients include Pacific Gas & Electric Co., Dow Chemical Co., petroleum refiner Valero Energy Corp., Occidental Petroleum Corp., and the engineering and design company AECOM, which has a history of seeking nuclear-related contracts with DOE.

Miller, who wasn't immediately available for comment, is also lobbying for Ohio utility FirstEnergy Corp., Southern Co. and the Nuclear Energy Institute — all of which could benefit from Perry's recent request for FERC to develop rules that could boost struggling nuclear and coal-fired generation.

Critics of Perry's proposal say they suspected DOE is attempting to boost FirstEnergy.

Playing into that speculation is a leaked Aug. 4 letter in which a top Trump aide was reportedly told by Trump to give Charles Jones, CEO of FirstEnergy and its coal supplier, Murray Energy Corp., "whatever" they were asking for (*Energywire*, Aug. 23).

"DOE is a good area to mine for clients because they give away a lot of money," said a lobbyist who works on energy issues. "DOE is awash in money and grants and loan guarantees, it's a fertile ground for lobbyists."

EPA

Gun missing from HQ for more than 3 years — watchdog

Kevin Bogardus, E&E News reporter

Published: Tuesday, October 3, 2017

EPA headquarters in Washington. EPA/Flickr

There has been a gun missing from U.S. EPA headquarters for more than three years.

The firearm, which belonged to a security contractor, was first reported missing on June 17, 2014, according to an EPA inspector general investigative report obtained by E&E News under the Freedom of Information Act.

That day, an individual with EPA's security management division — his or her name is redacted in the report — contacted Assistant EPA Inspector General for Investigations Patrick Sullivan to report the missing gun, which was a Glock 17 9 mm, along with a can of oleoresin capsicum spray, otherwise known as pepper spray. The gun and pepper spray had gone missing from a guard control room in the William Jefferson Clinton Federal Building.

An EPA IG spokesman told E&E News the gun has still not been recovered.

"In this case, the gun actually belonged to the contractor responsible for providing security at EPA headquarters. However, it went missing while at EPA headquarters. The missing gun still has not been recovered," said EPA IG spokesman Jeff Lagda.

EPA's internal watchdog took several steps to try to find the missing gun.

The IG's special agents interviewed four people in June 2014, including the last known person who was

assigned the firearm. Those interviews proved to be "negative" in providing any leads on the location of the gun.

A Glock 17 9mm handgun, held by an EPA security contractor, was first reported missing at agency headquarters in June 2014. Askild Antonsen/Wikipedia

In September that year, the IG office distributed a letter offering a $1,000 reward for information leading to the recovery of the gun.

"To date, the OIG has not received any leads from the letter," said the report.

Special agents with the inspector general then administered questionnaires to roughly 60 people in February 2015 "in order to narrow down potential subjects for polygraph examinations." Then the following May, they conducted a lie detector test on an individual whose name was redacted in the report — the results of which were again "negative" in producing any leads.

The inspector general decided to close the investigation for the missing gun in March last year.

"All investigative leads for this case have been exhausted," said the report. "It is the opinion of this office that any further investigation is not in the best interest of the government. Therefore, this case is being closed with no further action."

Asked whether the EPA IG had still-open investigations to look for other missing guns, Lagda said, "It is the policy of the OIG to neither confirm nor deny the existence of an open investigation."

Other misplaced, stolen firearms

There have been other reported instances of lost firearms at federal agencies.

In March 2015, a special agent for EPA's inspector general left his or her service weapon in a bathroom stall at agency headquarters. That agent ended up serving a one-day suspension in July that year, according to a report obtained by E&E News under FOIA (*Greenwire*, Feb. 22, 2016).

Another report, this time by the Department of the Interior's IG, showed that a U.S. Park Police officer didn't properly secure a handgun for several days in April 2014 (*Greenwire*, April 6, 2016).

The infractions may seem minor, but they can have dire consequences.

A stolen Bureau of Land Management handgun was involved in a July 2015 shooting on the San Francisco pier — a case that garnered national attention after the alleged shooter was found to be an illegal immigrant (*Greenwire*, July 9, 2015).

Last year, former Rep. Jason Chaffetz (R-Utah), then chairman of the House Oversight and Government Reform Committee, asked agencies, including EPA, to account for their lost and missing firearms. A 2012 Bureau of Justice Statistics report found that 202 EPA employees were authorized to carry guns.

Republican lawmakers in the past have targeted the agency's authority to hold and use firearms. They have offered legislation, which has failed to advance, that would limit EPA's arsenal or even ban its agents from carrying any firearms.

AIR POLLUTION

Groups decry EPA's failure to meet ozone deadline

Sean Reilly, E&E News reporter

Published: Tuesday, October 3, 2017

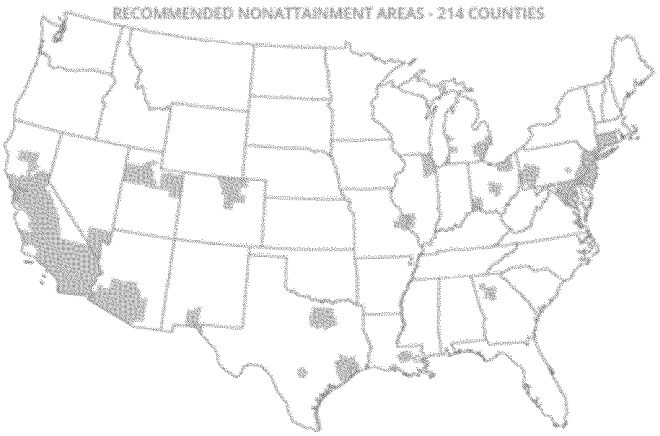
Smog over Los Angeles. Andrew Hitchcock/Flickr

This article was updated at 5:10 p.m. EDT.

Public health and environmental groups voiced dismay and anger today at U.S. EPA's failure to meet a statutory deadline to make final compliance decisions for its 2015 ground-level ozone standard.

"To say the least, it's disappointing," said Janice Nolen, the American Lung Association's assistant vice president for national policy, in an interview. "It's crucial that these steps be put in place in order to protect public health."

Under the Clean Air Act, the attainment determinations had been due Sunday, although it was expected that EPA would allow itself an extra day. But the agency has yet to release the designations or offer a detailed explanation for the delay. In an emailed response late this afternoon to questions posed almost seven hours earlier, a spokeswoman said that EPA "is continuing to work closely with the states to work through the designations process for the 2015 ozone standard." She did not reply to a separate question on the agency's timetable for making the final decisions.



[+] The District of Columbia and 214 counties in 21 states are in nonattainment for the 2015 ozone standard, according to preliminary data turned in last year. Congressional Research Service

EPA Administrator Scott Pruitt "is showing a blatant disregard for the law by refusing to give Americans a full accounting of how much unsafe smog they're breathing," John Walke, a senior attorney at the Natural Resources Defense Council, said in a news release. "That's irresponsible."

Both the American Lung Association and NRDC are among the plaintiffs in a lawsuit seeking to enforce the Oct. 1 deadline. The attainment designations are an important milestone because they start the clock for states to come up with cleanup plans.

Under the Obama administration, EPA had tightened the ozone standard in October 2015 from 75 parts per billion to 70 ppb, citing the need to protect public health in light of new research showing that ozone posed dangers at lower levels than previously thought.

It was only the fourth time since 1971 that EPA had revised its air quality benchmark for ozone, the main ingredient in smog and a lung irritant linked to asthma attacks in children and aggravated breathing difficulties for people with emphysema. Ozone is closely associated with the use and production of fossil fuels; it is generated by the reaction of nitrogen oxides and volatile organic compounds in sunlight.

Bringing the nation into full compliance with the tighter standard, however, could take decades. The first step toward implementation came last fall when states turned in their attainment recommendations; 214 counties and the District of Columbia are failing to meet the 70 ppb standard, according to a recent Congressional Research Service report.

Under the Clean Air Act timetable, EPA was supposed to make the final decisions by this past weekend. But the energy industry and other business groups have long been lobbying for a delay, noting that EPA is still in the process of implementing the previous 75 ppb standard set in 2008. In June, Pruitt announced a one-year extension for all attainment designations for the 2015 ozone standard on the grounds that he needed more information before making final decisions.

Public health groups and Democratic-led states sued, however, to block the extension; in August, Pruitt

backed down, but left the door open to further postponements in at least selected areas. The consolidated litigation is pending before the U.S. Court of Appeals for the District of Columbia Circuit. EPA is seeking to have the suit dismissed as moot.

DOE

Agency to whistleblowers: 'You are not alone'

Hannah Northey, E&E News reporter

Published: Tuesday, October 3, 2017

Department of Energy headquarters in Washington. DOE

Employees and contractors across the Department of Energy today tuned into an hourlong video refresher on the consequences of leaking classified and sensitive information.

Part of the crackdown on "leakers" that's plagued the Trump administration for months, the video pushes the message that employees shouldn't fear retaliation for blowing the whistle on fraud, waste and abuse.

Near the end of the video, acting Inspector General April Stephenson charges that all DOE employees are legally required to report wrongdoing, and provided a confidential hotline.

"We frequently hear from people that they fear retaliation when bringing matters to the hotline," Stephenson said. "You are not alone."

DOE, the Interior Department, U.S. EPA and the Nuclear Regulatory Commission were among more than 50 agencies directed by the White House to conduct an hourlong training session to prevent leaks of "classified" and "controlled unclassified" information.

The emphasis on whistleblower protections was but a small section of DOE's training video, which included a panel discussion and footage from August of Attorney General Jeff Sessions' condemnation of

the "staggering number of leaks" undermining the federal government, including leaks of President Trump's internal White House conversations.

"Leaks are incredibly damaging to our intelligence mission and capabilities," Sessions said in the video. "I have this warning for would-be leakers: Don't do it."

Aside from Sessions, the DOE video centers largely on a panel discussion featuring DOE Chief Information Officer Max Everett; Steven Black, director of the Office of Intelligence and Counterintelligence; and Bob Lingan, director of the Office of Corporate Security Strategy.

DOE in particular has experienced leaks of unclassified information relating to Energy Secretary Rick Perry's request for a study on grid reliability, which ultimately made its way into the press.

Panelists warned that leaking classified information from DOE could give away sensitive military strategies or damage relationships with allies, while disclosing sensitive but unclassified information threatens to degrade trust between the department and its partners.

"When that's put out in the public domain without authorization," Everett said, "people are less likely to share that information with us or collaborate with us over time."

ADVOCACY

Expanding API set to move headquarters

Sam Mintz, E&E News reporter

Published: Tuesday, October 3, 2017

As its staff grows and its political influence remain immense, the top oil and gas trade group is moving its headquarters to a new office that is both bigger and closer to Capitol Hill.

The American Petroleum Institute's new location will be at Capitol Crossing at 200 Massachusetts Ave. NW, near Union Station and less than a mile from the U.S. Capitol.

The organization also touted that its new space, which will be ready for use by the end of next year, will be LEED-certified and will feature green technology like cogeneration power and graywater use.

"As our organization continues to grow and we expand the reach of our safety standards globally, we wanted our new headquarters to reflect our industry's leadership on safety, technology, and environmental progress," said Jack Gerard, API's president and CEO, in a statement. "Our new home will be state-of-the-art in green and other technologies, and it will reflect our members' efforts to innovate, improve the environment, and reduce emissions."

API, which has more than 625 members across the oil and natural gas industries, is a major player in energy politics.

In the 2016 election cycle, it contributed more than $2 million to candidates and political parties — primarily Republicans, according to the Center for Responsive Politics' website OpenSecrets.org.

It also has hefty influence in the lobbying world, having spent more than $6 million last year to influence policymakers and nearly $8 million the year before, in addition to regularly sending representatives to Capitol Hill hearings and weighing in on key energy policy issues.

API says its work on establishing and maintaining safety standards has been booming, too, as global energy development increases. Its global industry services staff, for example, has grown by 30 percent in the last two years, a spokeswoman said.

VIRGINIA

Ads target Gillespie, Trump on environment

Nick Bowlin, E&E News reporter

Published: Tuesday, October 3, 2017

The Virginia League of Conservation Voters political action committee announced a $200,000 digital ad buy opposing Republican Ed Gillespie in the state's gubernatorial contest this year.

The group has been active in the race, working to defeat Gillespie and back Democrat Ralph Northam. This brings LCV Virginia's spending on the election to $2 million.

"Ed Gillespie has a long history working for corporate polluters who want to poison our air and water to boost their own profits," said Michael Town, executive director of the Virginia LCV PAC, in a statement.

The ads, created with Democratic powerhouse Priorities USA Action, will run on YouTube, Pandora Internet Radio, local news websites and digital streaming platforms.

They will include links to an LCV-supported website, PollutEdGillespie.com.

Gillespie supports offshore drilling — currently banned in Virginia — backed President Trump's decision to exit the Paris climate deal and has questioned the science of human-caused climate change.

Environmentalists also criticize his ties to Americans for Prosperity, the advocacy group backed by petrochemical billionaires Charles and David Koch. AFP is running anti-Northam ads (*Greenwire*, Sept. 6).

NextGen America, the advocacy group led by billionaire environmentalist Tom Steyer, is spending $2 million aimed at getting young and infrequent voters to the polls in support of Northam.

Northam ad

In an ad released this morning, Northam criticized President Trump for environmental regulation rollbacks, budget cuts and the attempted repeal of the Affordable Care Act.

"Donald Trump proposed cutting Virginia school funding, rolling back our clean air and water protections, and taking away health care from thousands of Virginians," he says in the spot. He goes on to criticize Gillespie for failing to stand up to the president.

Northam, a former pediatrician and the state's lieutenant governor, has made opposing Trump and his administration's policies a central part of his campaign platform.

Statewide polls consistently show the president's approval rating hovering in the 30 percent range in Old Dominion; Trump lost in the state to Hillary Clinton in the 2016 presidential election.

As of Aug. 31, Northam had outraised Gillespie $15 million to $10 million, according to the Virginia Public Access Project.

AIR POLLUTION

EPA floats Texas coal plant emissions trading program

Sean Reilly, E&E News reporter

Published: Tuesday, October 3, 2017

U.S. EPA is moving forward with an emissions trading program for Texas coal-fired power plants to cut sulfur dioxide emissions under the agency's regional haze regulations, according to a newly signed final rule.

The rule, filed in federal court late yesterday, would rely on the intrastate trading program as a substitute for directly requiring the plants, owned by Luminant Generation Co. LLC and other producers, to add pollution controls under the agency's best available retrofit technology (BART) requirements.

EPA submitted the rule, originally due a decade ago, in response to a 2012 consent decree settling a lawsuit brought by the National Parks Conservation Association and other environmental groups.

In a joint status report also filed late yesterday with U.S. District Court for the District of Columbia, a lawyer for those organizations said they had not had time to determine whether the plan complies with the consent decree.

But in an interview today, Sierra Club senior attorney Elena Saxonhouse called the rule a "complete reversal" of the BART proposal that EPA had advanced last December.

"It's really another do-nothing plan and would allow the same amount of pollution that is being emitted today from all of these sources," Saxonhouse said. She declined to comment on legal strategy but predicted that the court would look "very carefully" at the rule.

No state's power sector spews more sulfur dioxide (SO2) than that of Texas, which in 2015 released some 260,000 tons of the acrid pollutant, according to official figures.

Under the Obama administration's proposal last December, EPA had sought to require adoption of retrofit technology; the Sierra Club had estimated at the time that they could cumulatively cut SO2 releases by more than 180,000 tons.

Under the Trump administration, EPA broached the intrastate trading option last month, saying in a court filing that it offered "a market-based approach that could lead to a more efficient outcome" than costly source-by-source controls.

The agency also sought a delay in the deadline for submitting the final rule from September until the end of next year; U.S. District Judge Amy Berman Jackson rejected that request.

EPA's regional haze program, authorized under the Clean Air Act, is intended to restore natural vistas to 156 large national parks and wilderness areas.

AIR POLLUTION

Court OKs more time for Ark. haze talks

Sean Reilly, E&E News reporter

Published: Tuesday, October 3, 2017

U.S. EPA and an array of litigants will get another four weeks to work out their differences on a regional haze reduction plan for Arkansas.

In an unsigned order issued late yesterday, the 8th U.S. Circuit Court of Appeals agreed to the joint request from all sides to keep the consolidated lawsuits in abeyance until Oct. 31.

The litigation has been on hold since March; while the St. Louis-based court had said this summer it would not look favorably on any further delays, it was apparently persuaded by last week's plea from EPA, the Arkansas attorney general's office, power producers and environmental groups that they needed more time to work out a deal that could resolve at least some of the issues in the case (*Greenwire*, Sept. 27). That assessment appears to represent progress toward an agreement; in June, the National Parks Conservation Association and the Sierra Club had denounced the settlement talks as a sham and unsuccessfully urged the court to restart legal proceedings (*Greenwire*, June 12).

The regional haze program, authorized by the Clean Air Act dating in its current form back to 1999, is intended to restore unclouded visibility to 156 national parks and wilderness areas by 2064. EPA's initial plan for Arkansas, published last September after federal regulators rejected a state strategy as inadequate, aimed to cut emissions of sulfur dioxide and nitrogen oxides (NOx) owned by Entergy Corp. and other power producers by tens of thousands of tons annually.

Under the Trump administration, however, EPA has since proposed to push back the deadlines for several plants to meet the new NOx limits from 2018 to early 2020. The Arkansas Department of Environmental Quality is also working on revisions to a state implementation plan that could eventually narrow or render moot the issues in the litigation, according to last week's status report.

LAW

Green group sues for documents on advisory panel disbanding

Amanda Reilly, E&E News reporter

Published: Tuesday, October 3, 2017

The Center for Biological Diversity today launched its latest legal lawsuit against the Trump administration over the disbanding of a federal climate advisory committee.

The green group alleges NOAA failed to respond to a Freedom of Information Act request for documents related to the termination of the Advisory Committee for the Sustained National Climate Assessment.

In August, the Trump administration quietly let the charter for the committee end after a two-year run (*Greenwire*, Aug. 21).

"After axing a panel full of climate experts, the Trump administration is illegally refusing to release public

records about what motivated that dangerous decision," said Howard Crystal, a senior attorney at CBD's Climate Law Institute. "Kicking these experts to the curb is a ridiculous rejection of scientific reality that will leave us even less prepared for monster hurricanes and other climate change devastation."

The Advisory Committee for the Sustained National Climate Assessment was a 15-member panel of academics, industry representatives, government officials and nonprofit leaders tasked with deciding how to use the National Climate Assessment for long-term resilience planning.

The National Climate Assessment is mandated for release every four years, but there have been just three editions since the law's passage in 1990. A draft of the fourth report — due out next year — over the summer became a contentious issue for the Trump administration (*Climatewire*, Aug. 8).

Shortly after the administration disbanded the advisory panel in August, the Center for Biological Diversity filed a FOIA request for emails, call logs and notes from NOAA and all agencies that participate in the Subcommittee on Global Change Research, which plays a central role in preparing the National Climate Assessment.

According to today's complaint in the U.S. District Court for the District of Columbia, NOAA neither responded to the request nor provided responsive documents.

The documents could inform the group's next moves in court.

"We need to find out whether the administration nixed the committee as part of a plan to censor or delay the upcoming National Climate Assessment," Crystal said. "We'll fight in court to prevent any interference with this crucial scientific report."

Separately, a free-market group today filed a lawsuit in the D.C. district court seeking documents related to the Obama administration's work on the Paris climate deal.

The Competitive Enterprise Institute's complaint says that the State Department failed to respond to a FOIA request seeking correspondence of former Special Envoy for Climate Change Todd Stern, former climate legal adviser Sue Biniaz and former State Department Director of Policy Planning Jake Sullivan.

CEI says the record would show that the Obama administration was influenced by outside groups in developing the agreement.

"In the absence of the Trump administration taking the initiative to review the internal record of the disgraceful process of circumventing the Senate and the U.S. Constitution to enter the Paris climate treaty, we will continue seeking to make public all of that record we are able," said CEI senior fellow Chris Horner in a statement.

POLITICS

NYC releases plan to keep city in Paris Agreement

Arianna Skibell, E&E News reporter

Published: Tuesday, October 3, 2017

New York City Mayor Bill de Blasio (D) has introduced a plan to reduce carbon emissions, keeping in line with the goals of the Paris Agreement. Kevin Case/Flickr

New York City Mayor Bill de Blasio has released a three-year plan to reduce greenhouse gas emissions in compliance with the international Paris climate accord.

The plan, the first of its kind, will put the city on a path to make the equivalent emissions reduction of taking more than 2 million cars off the road by 2030, according to the report.

"Big problems require big solutions — and New Yorkers are already hard at work to meet the most ambitious goals of the Paris Agreement," de Blasio, a Democrat, said in a statement.

"In the Trump era, cities have to lead the way when it comes to fighting climate change," he said. "Hotter summers and powerful storms made worse by climate change are an existential threat to a coastal city like ours, which is why we need to act now."

The so-called 1.5 Climate Action Plan is intended to help cap warming at 1.5 degrees Celsius above preindustrial levels, a goal agreed upon in the Paris accord. New York City will implement a series of emissions reduction programs across the energy, transportation, building and waste sectors.

Cities and states have pledged to step up and reduce emissions following President Trump's announcement that the United States will withdraw from the climate pact, which includes almost 200 countries (*E&E News PM*, Sept. 20).

Earlier this year, de Blasio signed an executive order committing his city to the principles of the agreement and directing city agencies to identity citywide actions to reduce emissions.

"Reducing the city's greenhouse gas emissions is critical to keep the worst impacts of climate change at bay," Mark Chambers, director of the Mayor's Office of Sustainability, said in a statement.

"We know this is possible, and we know we have to work faster. The plan released today builds on the ambitious work we've already started, and demonstrates how New York City will continue to work

aggressively to act locally, even as we think globally to create a healthy and thriving NYC," Chambers continued.

Separately, Democratic lawmakers are pushing for Congress to codifying that climate change is real. Rep. Adriano Espaillat (D-N.Y.) yesterday introduced a resolution supporting the understanding that global warming is a reality.

He was joined by Reps. Dwight Evans of Pennsylvania, Nanette Diaz Barragán and Jared Huffman of California, Eleanor Holmes Norton of the District of Columbia, Debbie Wasserman Schultz of Florida, José Serrano of New York, Betty McCollum of Minnesota and Luis Gutierrez of Illinois.

Among other statements, the measure contends human activity is changing the "natural greenhouse" of the planet and that current warming is likely to be the result of human activity. It states that there is consensus in the scientific community that climate change is a concern, and extreme weather events — such as Hurricanes Harvey, Irma, Jose and Maria — were exacerbated by global warming.

FINANCE

40 Catholic groups reject fossil fuel investments

Published: Tuesday, October 3, 2017

Forty Roman Catholic organizations announced today they will no longer invest in fossil fuels.

The coalition includes groups from all over the world and is the largest green energy movement to date of Catholic groups, according to the Global Catholic Climate Movement.

The "joint divestment from fossil fuels is based on both their shared value of environmental protection and the financial wisdom of preparing for a carbon-neutral economy," the group said.

The coalition includes institutions from the Italian town of Assisi, birthplace of St. Francis, patron saint of animals and Pope Francis' namesake.

Energy-saving lights have been installed on St. Francis' tomb. The pope referenced the saint in a 2015 encyclical urging international action on global warming.

The groups did not estimate their fossil fuel holdings. Several said they mostly want to block any future investments (Alister Doyle, Reuters, Oct. 2). **— NB**

MINING

Rio Tinto successfully tests first driverless ore train

Published: Tuesday, October 3, 2017

Rio Tinto PLC has completed a successful test run of a driverless ore train in Australia's Pilbara region.

Yesterday, the company said a pilot run traveled nearly 62 miles while operated by people in a control room hundreds of miles away.

That puts Rio Tinto on pace for a late-2018 full rollout of the AutoHaul project, which has been touted as a transformational technology but was dogged for years by software issues and delays.

"This successful pilot run puts us firmly on track to meet our goal of operating the world's first fully autonomous heavy-haul, long-distance rail network," said Chris Salisbury, CEO of Rio Tinto's iron ore division.

Mining companies say driverless equipment will increase efficiency and cut costs, vital goals for an industry still pulling out of a dive from the commodity price slump of the past several years.

Rio Tinto is one of the largest iron ore exporters in the world (Robb Stewart, *Wall Street Journal*, Oct. 2). **— NB**

ELECTRIC VEHICLES

GM, Ford pledge 33 new models

Published: Tuesday, October 3, 2017

Amid pressure from China, both General Motors Co. and Ford Motor Co. are revving up their plans for new electric vehicle models.

GM announced yesterday that it will introduce 20 new electric vehicle models by 2023, including two within the next year and a half.

"General Motors believes in an all-electric future," said Mark Reuss, GM's global product chief. "Although that future won't happen overnight, GM is committed to driving increased usage and acceptance of electric vehicles."

After GM's announcement, Ford unveiled its own $4.5 billion plan to develop 13 electrified models over the next several years.

Both automakers face stiff competition from China, which has committed to accelerating electric vehicle production by 2019 and eventually banning gasoline-powered cars (*Climatewire*, Oct. 2).

Other top competitors include Tesla Inc. and the German automakers Volkswagen AG and Daimler AG (Vlasic/Boudette, *New York Times*, Oct. 2). **— MJ**

ELECTRIC VEHICLES

Tesla falls far below Model 3 production goal

Published: Tuesday, October 3, 2017

Tesla Inc. fell well short of its goal of building 1,500 Model 3 cars in the third quarter, evidence that the company's production increase is not going according to plan.

The company announced yesterday that it built 260 Models 3s between July and September. It blamed "production bottlenecks."

Tesla had predicted in August that it would be making 5,000 Model 3s per week by the end of the fourth quarter.

The $35,000 Model 3 is Tesla's attempt to make a mainstream electric car.

"It is important to emphasize that there are no fundamental issues with the Model 3 production or supply chain," Tesla said in a statement. "We understand what needs to be fixed and we are confident of addressing the manufacturing bottleneck issues in the near-term."

In announcing the Model S over the summer, CEO Elon Musk said the first six months at the Fremont, Calif., plant could be "manufacturing hell" while the factory learns how to build the new car.

Anticipation for the cars remains high. Company shares have gone up more than 50 percent this year. Tesla reported increased sales for its Model S sedans and Model X sport utility vehicles (Tim Higgins, *Wall Street Journal*, Oct. 2). **— NB**

GERMANY

Appeal delays ban on diesel cars in Stuttgart

Published: Tuesday, October 3, 2017

A German state is appealing a court ruling mandating that it ban diesel cars on the streets of Stuttgart, pushing back the start of the ban from the beginning of next year.

The government of Baden-Württemberg said yesterday it would challenge the ban in its capital city, after a court ruled it was the only way to reduce nitrogen oxides and dust particle emissions to meet E.U. standards (*Greenwire*, Feb. 21).

The environmental group DUH successfully petitioned for the ban in the wake of the Volkswagen AG emissions cheating scandal, which caused widespread scrutiny of diesel cars and their potential to cause respiratory disease.

The state, governed by a coalition between the environmentalist Green Party and conservatives, is home to several carmakers and auto companies, including Mercedes-Benz and Porsche (Escritt/Bryan, Reuters, Oct. 2). **— NS**

AN E&E NEWS PUBLICATION

CLIMATEWIRE — Wed., October 4, 2017

READ FULL EDITION

1.EPA:

6 big climate meetings on Pruitt's calendar

U.S. EPA Administrator Scott Pruitt's calendar — made public yesterday by the liberal watchdog group American Oversight — offers a behind-the-scenes look at the Trump administration's early moves on climate change.

TOP STORIES

2.GRID:
Trump's cash-for-coal plan rewards political base

3.CLEAN POWER PLAN:
Pruitt is poised to kill the climate rule. What's next?

4.POLITICS:
Obama disaster chief: It's past time to talk climate

TRUMP ADMINISTRATION

5.EPA:
Agency hosts industry for 'mutual admiration' talk

ADVOCACY

6.BUSINESS:
Green group roasts Starbucks for missing goals

INTERNATIONAL

7.UNITED KINGDOM:
Scotland snow-free after 'glacier' melts

8.SEA-LEVEL RISE:
Islanders find conflict when relocating

9.ARCTIC:
Russia's drive for gas hems in reindeer herders

SOCIETY

10.FILM:
Hollywood climate drama doesn't sell activism

AN E&E NEWS PUBLICATION

ENERGYWIRE — Wed., October 4, 2017

READ FULL EDITION

1.GRID:

Disappointment and hope in Perry's Texas

AUSTIN, Texas — Count the power sector in Rick Perry's home state among those unimpressed with the Energy secretary's proposal to redefine competitive markets.

TOP STORIES

2.PUERTO RICO:
Trump hails recovery with 7% of island repowered

3.PUBLIC LANDS:
Royalty review begins today

4.DOE:
Obama-era clean energy jobs study in limbo under Trump

LAW

5.METHANE:
States to court: Keep BLM out of climate change policy

CONGRESS

6.SECURITY:
Lawmaker weighs hitting utilities 'where it counts' on cyber

OIL AND GAS

7.REGULATION:
States see chance to gain permit authority on federal land

8.GAS EXPORTS:
Industry study sees limited downside to growing LNG shipments

9.PEOPLE:
Head of state oil and gas group to step down

ELECTRICITY

10.TECHNOLOGY:
EVs can be good for the grid if states act fast — report

11.NUCLEAR:
Fortune 200 companies express interest in Santee Cooper

12.OFFSHORE WIND:
Shell, others look to sell part of Dutch wind farm stake

INTERNATIONAL

13.HYDRAULIC FRACTURING:
Scotland bans fracking after wave of public opposition

14.HYDRAULIC FRACTURING:
More Australians favor in-state fracking moratorium — poll

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To: Jones, Rhea[Jones.Rhea@epa.gov]
Cc: Weber, Rebecca[Weber.Rebecca@epa.gov]; Wood, Anna[Wood.Anna@epa.gov]; Lorang, Phil[Lorang.Phil@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Anderson, Lea[anderson.lea@epa.gov]; Marks, Matthew[Marks.Matthew@epa.gov]; Werner, Christopher[Werner.Christopher@epa.gov]; Keas, Ashley[keas.ashley@epa.gov]; HertzWu, Sara[HertzWu.Sara@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Wolkins, Jed[wolkins.jed@epa.gov]
From: Jay, Michael
Sent: Fri 8/4/2017 9:40:18 PM
Subject: RE: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD
Proposal_2017_NE_RH_5_YR_RP.DOCX
Technical Support Document for NE RH Remand Proposal and 5-yr Progress.docx

Rhea,

Thanks for clarification. As promised, attached are minor revisions to the Nebraska RH 5-yr plan, remand and TSD.

Becky has discussed the RH timeline with our Regional Administrator and he would like to have the RH action signed by the end of August. I will have Jed W revise it slightly to reflect that. We will need to keep that timeline. Based on your message it appears Chris could help us on the 5 year report right away and we would appreciate that. However our main focus is getting review of the TSD from OAQPS, and OGC review of the remand portion of the FR.

I realize our timelines don't necessarily line up but these are the marching orders we've got at this point. BW is out of office all of next week.

Mike Jay

Branch Chief

Air Planning and Development Branch

USEPA R7

913-551-7460

From: Jones, Rhea
Sent: Wednesday, August 02, 2017 2:52 PM
To: Hawkins, Andy <hawkins.andy@epa.gov>; Jay, Michael <Jay.Michael@epa.gov>
Subject: RE: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD

Thanks Andy and Mike!

I need to clarify what our availability will be for review. Phil's been assigned to work on TX Regional Haze issues for 100% of his time over the next couple of weeks, as has Melinda and some key OGC staff, since TX RH has been identified as a high priority and has an upcoming CD deadline. We'll need to get past that, and likely the Arkansas RH issues, (another priority area for the folks who would otherwise be involved with the Nebraska notice). The rest of my team has not been involved in the Nebraska remand issues, though Chris could start review on the 5-year progress report aspects. So, it will likely be closer to late August/early September before these other folks will be available for review. I'm hoping that will work out for you all as you continue developing the working draft.

In the meantime, I'll check in with Vera when she returns next week to see if she can initiate review for OAQPS and give us a head start, but I cannot commit her time without her input, so please stay tuned. I'll see if Chris can start review of the 5-year progress report aspects if that makes sense to do separately from the remand aspect. We'll do all we can to get started on this ASAP, but we are definitely working with some challenges….

Let me know if you have any questions or concerns.

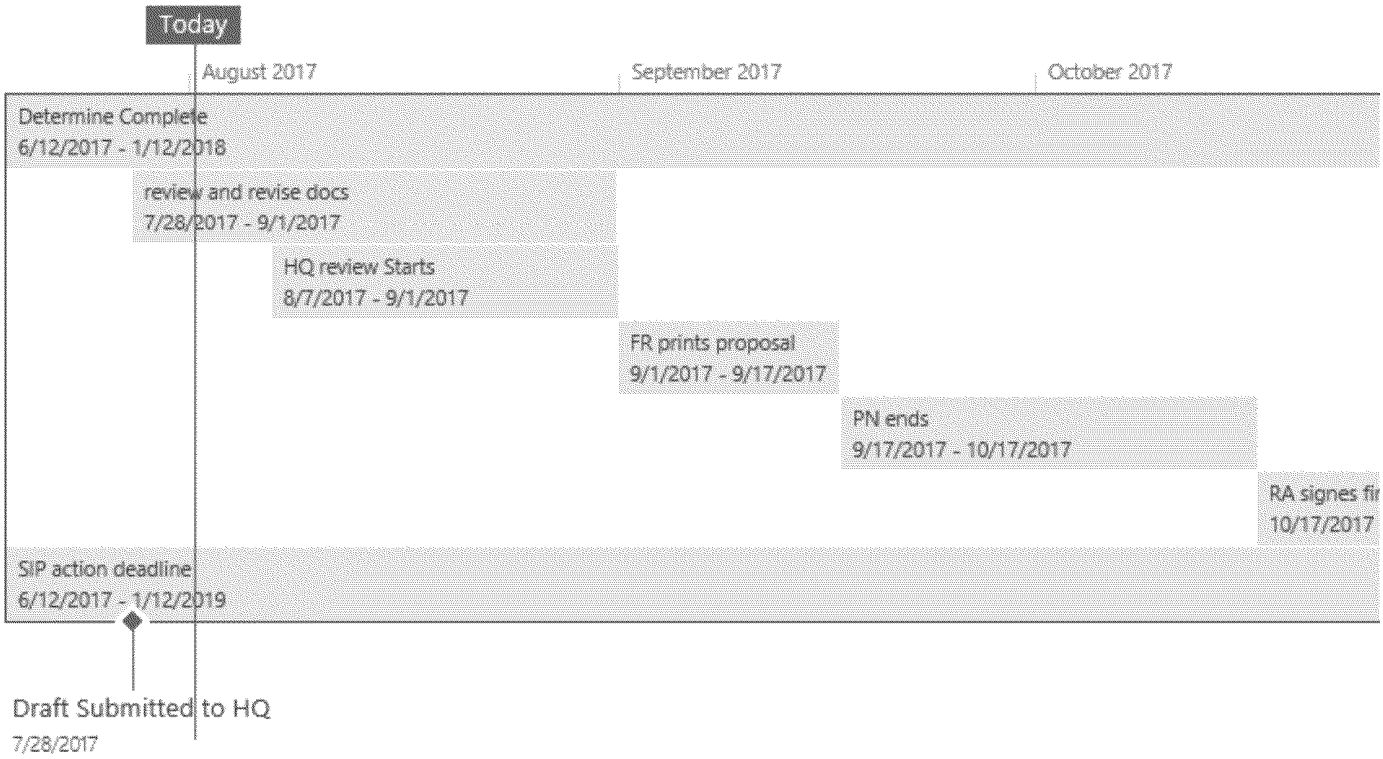
Thanks again!

~Rhea

From: Hawkins, Andy
Sent: Tuesday, August 01, 2017 12:10 PM
To: Jay, Michael <Jay.Michael@epa.gov>; Jones, Rhea <Jones.Rhea@epa.gov>
Subject: RE: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD

Rhea,

Below is a draft timeline. As Mike mentions below we will likely have some additional changes to the working draft language we shared and will work to get you those changes before Phil is available to start his review next week.



Andy Hawkins

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From: Jay, Michael
Sent: Tuesday, August 01, 2017 8:14 AM
To: Jones, Rhea <Jones.Rhea@epa.gov>
Cc: Hawkins, Andy <hawkins.andy@epa.gov>
Subject: RE: Draft Nebraska RH 5-year progress report approval/remand proposal and remand

TSD

Hi Rhea,

I think you are fine this week as you all have indicated. Becky had committed to Anna and company to get you the draft last week so we worked very hard to do that with the thought you all would look at it this week but certainly understand the S02 resource issue. Next week should be good. Becky had been on travel so actually has not provided her comments on this working draft, we are getting those this week so some hopefully small revisions to come from us as well.

Anna agreed based on everyone's workload we would work to finalize in the fall. We have a timeline I will send along so everyone is on same page for your planning purposes. I will work with Andy to get that sent over to you.

Mike Jay

Branch Chief

Air Planning and Development Branch

USEPA R7

913-551-7460

From: Jones, Rhea
Sent: Tuesday, August 01, 2017 5:53 AM
To: Jay, Michael <Jay.Michael@epa.gov>
Subject: FW: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD

Hi Mike,

Can you provide your insights on what's expected for review and timing of the attached notice and TSD? I'm not directly in the loop on the Nebraska actions and Phil is not available this week. My general understanding is that regarding the remand proposal, additional IMPROVE data was needed but would not be available until the end of the year, so the proposal would be in similar timing. Let me know if things have changed.

Thanks!

From: Jones, Rhea
Sent: Monday, July 31, 2017 11:15 AM
To: Hawkins, Andy <hawkins.andy@epa.gov>; Jay, Michael <Jay.Michael@epa.gov>
Cc: Weber, Rebecca <Weber.Rebecca@epa.gov>; Wood, Anna <Wood.Anna@epa.gov>; Lorang, Phil <lorang.phil@epa.gov>; Zenick, Elliott <Zenick.Elliott@epa.gov>; Anderson, Lea <anderson.lea@epa.gov>; Marks, Matthew <Marks.Matthew@epa.gov>; Werner, Christopher <Werner.Christopher@epa.gov>; HertzWu, Sara <HertzWu.Sara@epa.gov>; Wolkins, Jed <wolkins.jed@epa.gov>
Subject: FW: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD

Hello Andy,

Thank you for forwarding this draft. Phil has been our primary contact for Nebraska RH actions, and he's not available to engage on this, (as far as I know), for about at least week. Since there are FIP remand issues included with the 5-yr progress report action, we'll need him involved in review. Please let us know your intention- -I'm assuming this is a draft for staff level review prior to Regional action?

From: Hawkins, Andy
Sent: Friday, July 28, 2017 4:40 PM
To: Weber, Rebecca <Weber.Rebecca@epa.gov>; Wood, Anna <Wood.Anna@epa.gov>; Jones, Rhea <Jones.Rhea@epa.gov>; Lorang, Phil <Lorang.Phil@epa.gov>; Zenick, Elliott <Zenick.Elliott@epa.gov>; Anderson, Lea <anderson.lea@epa.gov>; Marks, Matthew <Marks.Matthew@epa.gov>; Werner, Christopher <Werner.Christopher@epa.gov>; Keas, Ashley <keas.ashley@epa.gov>
Cc: HertzWu, Sara <HertzWu.Sara@epa.gov>; Jay, Michael <Jay.Michael@epa.gov>; Wolkins, Jed <wolkins.jed@epa.gov>
Subject: Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD

Deliberative Attorney-Client Privileged

All - please find attached the Draft Nebraska RH 5-year progress report approval/remand proposal and remand TSD. Please share with others involved that I might have missed.

Have a great weekend!

Thanks,

Andy

Andy Hawkins

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7179 office

hawkins.andy@epa.gov

To: Doster, Brian[Doster.Brian@epa.gov]; Orlin, David[Orlin.David@epa.gov]; McConkey, Diane[Mcconkey.Diane@epa.gov]; Zenick, Elliott[Zenick.Elliott@epa.gov]; Smith, Kristi[Smith.Kristi@epa.gov]; Lee, Michael[lee.michaelg@epa.gov]; Rodman, Sonja[Rodman.Sonja@epa.gov]; Srinivasan, Gautam[Srinivasan.Gautam@epa.gov]; Schmidt, Lorie[Schmidt.Lorie@epa.gov]
Cc: Hooks, Samantha[hooks.samantha@epa.gov]
From: Graham, Cheryl
Sent: Mon 10/16/2017 3:24:59 PM
Subject: Agenda FOR Assistants Meeting
17-10-16 agenda.docx

Cheryl R. Graham
OGC/ARLO
(202) 564-5473

To: Donaldson, Guy[Donaldson.Guy@epa.gov]
From: Shar, Alan
Sent: Mon 8/21/2017 3:16:16 PM
Subject: FW: Action Information Sheet and blurb- Arkansas RH NOx SIP revision
Arkansas RH NOx SIP revision_Proposal_Action Information Sheet.docx
Arkansas RH NOx SIP revision_Proposal_blurb.docx

Guy – Attached please find the Action Info sheet re: AR and parallel processing action. Thanks.

Alan

From: Medina, Dayana
Sent: Monday, August 21, 2017 10:12 AM
To: Shar, Alan <shar.alan@epa.gov>
Subject: Action Information Sheet and blurb- Arkansas RH NOx SIP revision

Hi Alan,

Here is the Action Information Sheet and blurb for the Arkansas RH NOx SIP revision FRN.

Thanks,

Dayana Medina

U.S. Environmental Protection Agency, Region 6

Multimedia Division

State Implementation Section A (6MM-AA)

214-665-7241

To: Donaldson, Guy[Donaldson.Guy@epa.gov]
From: Rhea, William
Sent: Mon 8/21/2017 7:11:33 PM
Subject: RE: Action Information sheet for Air
Arkansas RH NOx SIP revision_Proposal_Action Information Sheet.docx

Guy,

Made slight change in this AIS. See what you think.

From: Donaldson, Guy
Sent: Monday, August 21, 2017 11:32 AM
To: Rhea, William <Rhea.William@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Cc: Stenger, Wren <stenger.wren@epa.gov>
Subject: Action Information sheet for Air

William we are pushing the Arkansas Minor NSR threshold out another week because of delays in ORC.

Region 6 Action Information Sheet

Action Title: Arkansas Regional Haze NO_X EGU SIP Revision Proposal

Purpose: To propose approval of a proposed revision of the Arkansas Regional Haze State Implementation Plan (SIP) that was submitted to EPA for parallel processing on July 12, 2017. Arkansas' proposed SIP revision relies on the Cross State Air Pollution Rule (CSAPR) to address the nitrogen oxide (NO_X) requirements for the Arkansas Electric Cooperative Corporation (AECC) Bailey Plant Unit 1; AECC McClellan Plant Unit 1; the American Electric Power/Southwestern Electric Power Company (AEP/SWEPCO) Flint Creek Plant Boiler No. 1; Entergy Arkansas, Inc. (Entergy) Lake Catherine Plant Unit 4; Entergy White Bluff Plant Units 1 and 2, and the Auxiliary Boiler; and Entergy Independence Plant Units 1 and 2. In conjunction with our proposed approval of the SIP revision, we are also proposing to withdraw federal implementation plan (FIP) emission limits for NO_X that currently apply to the nine aforementioned units.

Background: Arkansas submitted a Regional Haze SIP on September 9, 2008, to address the first regional haze implementation period. On March 12, 2012, EPA partially approved and partially disapproved the 2008 Arkansas Regional Haze SIP. On September 27, 2016, EPA published the Arkansas Regional Haze FIP, which addressed the disapproved portions of the 2008 Arkansas Regional Haze SIP. The Arkansas Regional Haze SIP revision proposal submitted on July 12, 2017, relies on the Cross State Air Pollution Rule (CSAPR) as an alternative to BART to address the NO_X BART requirements for Arkansas EGUs. The July 2017 Regional Haze SIP revision proposal also makes the determination that no additional NO_X emission controls for Arkansas sources, beyond Arkansas EGU participation in the CSAPR ozone season NO_X trading program, are required for achieving reasonable progress in Arkansas. The Arkansas Regional Haze SIP revision proposal would also replace the FIP's source specific NO_X emission limits that currently apply to the nine EGUs.

Key Issues/Internal Review: Region 6 program staff have worked closely with the Office of Regional Counsel, Office of General Counsel, and Office of Air Quality Planning and Standards staff in the development of this Federal Register notice. A key issue related to this proposed action is that Arkansas' July 2017 Regional Haze SIP revision is relying on CSAPR to satisfy the regional haze NO_X requirements for Arkansas EGUs. Our 2012 determination that CSAPR is better than BART and our November 10, 2016, proposed finding that CSAPR continues to be better than BART provide the basis for our proposed approval of Arkansas' July 2017 Regional Haze SIP revision. Therefore, we cannot finalize this proposed approval of the Arkansas SIP revision unless and until we finalize the November 10, 2016, proposed finding that CSAPR continues to be better than BART.

Stakeholder Involvement: Based on informal discussions with ADEQ staff, we are aware that Arkansas had discussions with the affected facilities and that they expressed their support of this SIP revision proposal and withdrawal of the corresponding parts of the FIP.

Legal Deadlines: There are no legal deadlines for signature on this Federal Register notice proposal. However, we find that it is prudent to move forward with this proposed action quickly, as the source-specific NO_X compliance deadlines currently required by the FIP are less than one year away.

Timing: It is recommended that the Federal Register notice proposing approval of the Arkansas Regional Haze SIP revision and withdrawal of the corresponding parts of the FIP be signed as expeditiously as possible.

Region 6 Contact: Dayana Medina, 214-665-7241 / Guy Donaldson, 214-665-7242